THE

MONTHLY REVIEW,

For DECEMBER, 1801.

ART. I. *Transactions of the Society instituted at London, for the Encouragement of Arts, Manufactures, and Commerce;* with the Premiums offered in the Year 1800. Vol. XVIII. * 8vo. pp. 500. 9s. Boards. Robson, &c.

NOTWITHSTANDING the establishment of new institutions for the purpose of promoting objects of general utility, the respectable society in the Adelphi continues to obtain a great accession to its members. From this circumstance, we with pleasure infer that the credit and reputation of this public body are in a progressive state: but at the same time that it records its acquisitions, it partakes of the common lot of humanity in having to lament some losses. Among those which it has lately sustained, are to be reckoned the death of its indefatigable and worthy Secretary, Mr. Samuel More; and that of Mr. George Wilson, who generously devoted himself to aid the assistant Secretary, Mr. Thomas Taylor, till the election of a successor to Mr. More took place. To the memory of this gentleman, an honourable tribute is paid by the present Secretary, Mr. Charles Taylor, who was elected in February last; and who, in the preface to this volume, has exhibited a favourable specimen of his abilities.

Mr. T.'s first office is to express the gratitude of the Society for a bequest of 500l. by the late Robert Nettleton, Esq. of Camberwell, Surrey, (whose portrait forms the frontispiece to the present volume,) who had been an early member, and of whom a short biographical sketch is given. He was born at Hull about the year 1694; and after having resided some time at Konigsberg and St. Petersburgh, he came to settle in London about the year 1735, and died in July 1774, bequeathing the above sum to the Society after the decease of his widow. His character is thus delineated:

'Blessed with a good natural understanding, improved by a classical education, he was conversant with the best Greek and Latin

* For an account of vol. xvii. see M. R. vol. xxxi. N. S.

authors, and attentive to mathematical and other scientific studies. In all his transactions, he was most upright and honourable; in his turn of mind, calm and benevolent; warmly interested for the welfare of his country, kind and hospitable to his friends, and of so bountiful a disposition to the poor, that, during the whole course of his business, he set aside a tenth part of his profits for the purposes of charity; which plan he so much extended in his latter years, as to give away a fourth, or even a larger portion of his income.' *

After having discharged the several debts of respect and gratitude, the Secretary proceeds to notice the several papers, &c. which constitute the volume before us. This analysis is neatly and concisely executed.

Of the long list of premiums annually published by the Society, as stimulants to ingenious and useful exertions, two only are particularly noticed in the preface. The first is in the class of *Agriculture*, and respects the sowing of spring Wheat and the planting of early Beans; which are matters so worthy of encouragement that they fully justify the new premiums:—the other is in the department of *Mechanics*, and is a renewed premium for a simple apparatus for cleansing chimneys from soot, so as to obviate the necessity of employing children within the flues. This is certainly a very desirable object, both for the sake of the poor boys, and of the housekeeper.

The subject of Fire is closely connected with that of chimneys; and we shall avail ourselves of this opportunity, to remark that we have often been surprized that the important object of stopping the progress of fire has not been prosecuted. By party-walls, we have effectually prevented the demolition of streets by that formidable element. This is a material point gained: but cannot we extend security still farther? Cannot houses be so constructed, that only the room in which the fire breaks out shall be destroyed, or at most only that story? Cannot there be a cheap and effectual contrivance for confining the flames to the upper or lower part of the house; and would not the offer of a premium to carry this idea into effect fall within the views of this Society? In general, fires commence, through the carelessness of servants, in the upper story; and if, on an alarm given, the communication could be cut off between it and the inferior stories, so that the flames could not possibly descend, the most valuable part of the property might be saved; or, supposing the fire to break out below, a secure retreat might be afforded to the family.

From this digression, we return to a consideration of the contents of the Volume before us.

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* A compliment is also paid, at the end of the preface, to the memory of the late Mrs. Montague.

The

The Papers relative to AGRICULTURE are

A letter from Mr. Mee to the Secretary, with *an Account of forty-nine acres and an half sown with Acorns*, on the estate and under the directions of the Marquis of Titchfield.

An *Account of the planting of* 400,000 *Larches*, on the estate of Thomas Johnes, Esq. M. P. of Hafod in Cardiganshire.

An account of eleven acres planted with various Forest Trees, (in all 9665, at the expence of 45l. 3s. 6d.) by the Rev. William Smith, of Craike, in the county of York.

A paper from Mr. John Lake, of Bapchild, near Sittingbourne, Kent, with *an Account of his having planted two Orchards*; one of which, according to the plan of T. S. Dyot Bucknall, Esq. is occupied by standard trees, placed 32½ *feet* asunder, with two dwarf apple trees between each standard.

A letter from John Cartwright, Esq. of Brothertoft farm, Lincolnshire, detailing his method of *Planting and Drilling Beans, and of sowing the land in the same year with Wheat.* This we believe to be no unusual mode of husbandry, where the land is clean and in good heart.

Sanguine (probably too sanguine) expectations are expressed by Mr. Jones, of Fish-Street-Hill, respecting the improvement of the culture of English Rhubarb, so as to make it equal to that of Turkey. An account is given, with certificates, of his having four thousand and fifty three plants of the *Rheum Palmatum*, or the officinal rhubarb, in a very thriving and promising state, in his grounds in the parish of Enfield.

The next paper contains the process pursued by John Mirehouse, Esq. of Brownslade, in the county of Pembroke, for *Draining and bringing into profitable cultivation a Waste Moor*, containing 274 acres. The whole appears to have been judiciously conducted. The cost was 508l.

The last paper in this class is an account from the Rev. H. Bate Dudley, of Bradwell-Lodge, Essex, of Land gained from the Sea; which was performed by an embankment made by a gang of twelve sea-wallers, in the space of seven months.

At the end of the volume, are additions to the class of *Agriculture*, which we shall notice in this place. They are as follow:

A communication from T. S. Dyot Bucknall, Esq. relative to the causes of *Blight on Fruit Trees*, and to the methods of producing good and certain crops of fruit; being a supplement to his various papers on Orcharding and Blight. With this letter, we find a plate representing niduses of insects, and the ground plan of Mr. Lake's orchard, (noticed above) explanatory of the mode there recommended, for planting dwarf and standard fruit-trees together. Mr. Bucknall has bestowed

much commendable attention on this useful branch of culture: but we think that he is a little *hobby-horsical* in wishing to use the word 'pulsation' with respect to trees.

A very minute detail next occurs, respecting the method employed by Mr. John Taylor, of Leipsig, in cultivating *the Beet Plant*, and in obtaining sugar from its root, with a syrup yielding melasses and ardent spirit. The utility of this process may be estimated by the following experiments:

'One hundred and ten pounds of Beet-roots, the Beta cicla of Linnæus, or white English Beet, washed, peeled, cleaned, and then grated, gave a mass which weighed eighty-seven pounds; out of which were pressed forty-one pounds and a half of juice, which was boiled with twenty ounces and a half of charcoal powder: this, when filtered and evaporated down until crystallized, produced full five pounds of a brownish yellow grained sugar, also five ounces of brown sirup.

'The above brown sugar, after being dissolved in six pounds of lime water, mixed with one pound of blood, then boiled, filtered, and afterwards evaporated, yielded four pounds five ounces and a half of purified brown sugar, and six ounces and a half of sirup.

'The four pounds five ounces and a half of sugar thus prepared, were again dissolved in six pounds of lime water, mixed with one pound of milk, then boiled for a quarter of an hour: during the boiling, a small quantity of white wine vinegar, and a little more milk, were added; the saccharine matter was filtered, and treated as before; the product was four pounds of well-grained white powder sugar.

'The residuum after pressure, the brown sirups of the two first processes, and the remains of the filtrations, weighed, when collected, forty pounds: they were mixed with one quart of yeast and eighty quarts of water, heated to 40 degrees of Reaumur's thermometer, or 112 of Fahrenheit's, and, after fermenting forty-eight hours, were distilled. They furnished, at the first distillation, fifteen quarts of weak spirit, which, on a second distillation, gave eight quarts of a better; from which, when rectified, were produced three quarts and a half of spirits resembling rum.

'From the result of this series of experiments it appeared, that after paying the farmer for the roots, and discharging all incidental expences whatever, a profit was yielded of nearly cent. per cent. on valuing the four pounds of white powder sugar at one shilling per pound, and the three quarts and a half of rum at one shilling per quart.

'It is not to be inferred from these experiments, that the profit from this process will always equal the above; for subsequent experiments have proved that the crops of Beet-roots cannot always be depended upon, nor do they always yield the same quantity of sugar; the produce of different years having varied, from two pounds of sugar per hundred weight of roots, to five pounds, according to circumstances which have intervened.'

A description of a steam-house for the purpose of *Forcing Pines*, &c. with an account of the method of *forwarding Vege-*

tation by means of Steam, is given by Thomas Wakefield, Esq. of Northwich; to which is added a diary by Mr. Butler, relating experiments in a steam-house belonging to Lord Derby. This paper contains many curious facts: but the plate is necessary to a clear conception of the details. It is hinted, in the preface, that a variety of additional remarks on this subject are at present omitted, for want of room.

Chemistry.

This science furnishes only one paper; viz. *an Account of twenty-one pounds seven ounces of Opium, obtained from Poppies* cultivated by Mr. Thomas Jones, of Fish Street-Hill, in his plantations at Enfield; and certified, by the testimony of several physicians, to be equal in quality to the best foreign opium. It must be a great satisfaction to Mr. Jones, after the exertion and perseverance which he appears to have displayed on this occasion, to find his endeavours so completely crowned with success. He complains, however, of the precariousness of our climate; which he considers as the only obstacle to the production of opium in this kingdom. We understand that this drug has also been obtained from the milky juice of Lettuces.

Mechanics.

An account of the discovery of a quarry of *Mill Stones* at Conway, in North Wales, similar to those which are known by the name of *French Burrs*, by Mr. Richard Bowes. A premium of 100l. was adjudged for this discovery; and Mr. Bowes having died in March last, the money was benevolently paid by the Society to his widow and children.

The invention of a Parish or Family Mill, by Mr. Thomas Rustall, of Purbrook-Heath near Portsmouth. The stones of this mill are vertical; and with the assistance of a man and boy, it is said to grind corn very well at the rate of one bushel of wheat per hour.—To this paper, is annexed the account of a *Bolting Machine*; both of which are represented in a plate.

Account of a *Family Oven*, by Mr. Holmes, of Castle Court in the Strand, which he calls a conducting oven; and which is heated, without flues, by means of a solid piece of iron projecting from its side into the fire. It is said to keep continually a baking-heat.

Description and drawing, by Mr. John Snart of Tooley Street, of *a Sliding Lever, fixed to the under side of a Cart*, for the relief of horses when thrown down and entangled in the thills. This is a very humane invention, the want of which is often experienced. The inventor calls it an *Alexippos*. (*A horse-reliever*.)

The two following papers contain descriptions of a *Door or Chest Lock*, by Mr. Thomas Arkwright of Charley Moor, Lancashire,

cashire; and of a *Lever Lock-Bolt for Folding Doors*, by Mr. William Bullock, of Portland-Street. The former is of so peculiar a construction as not only to baffle the efforts of house-breakers and picklocks, but it would puzzle servants to unlock it, should the key be accidentally left in the lock. Without the plate, it is impossible to convey an idea of this invention.

All those who are acquainted with the numerous horrible accidents which happen to riders in carriages, from horses taking fright, or from the reins breaking, will rejoice to read of the invention of an apparatus fixed behind the splinter bar, and communicating with the Coach-box, for releasing horses from the carriage when in full speed. This invention is due to Mr. George Davies; and it appears to succeed well, experiments having been made with it three times before His Majesty in Windsor Park. Great expences are incurred, in building the fashionable carriages of the present times, for patent axle-trees, patent spring-blinds, &c. &c. but an invention of this sort is of most importance, because safety ought to be consulted before shew, expedition, or even comfort. Some improvements may possibly be made in Mr. Davies's apparatus, or a preferable one may be contrived: but we are of opinion that something of the sort should be affixed to all carriages. We know that a contrivance of this nature has formerly been offered to the public: but we apprehend that it has not been sufficiently adopted.

Manufactures.

This class contains but one short paper, describing *a Loom*, invented by Mr. Thomas Clulow, of Old Cock-Lane, Shoreditch, for weaving figured ribbands.

Navigation *and* Commerce.

Here also we have only a single communication, but it is a very important one; relating to an *under-ground Inclined-Plane*, planned and contrived by the Duke of Bridgewater, and executed under his immediate inspection on his navigation at Walkden-Moor, Lancashire. This magnificent work was begun in Sept. 1795, and was finished in Oct. 1797. The Rev. Francis H. Egerton, the author of the paper, after having explained the necessity of this undertaking, on account of the Duke's under-ground navigation being on two levels, thus proceeds:

'Before a communication was made by an inclined plane, the coals were discharged by hand from the boats on the higher level, and were let down the pits in tubs by an engine and break-wheel into those upon the lower. To convey the boats themselves from the canals of the higher level into that of the lower, was the intent of making this under-ground inclined plane. By the help of this machinery,

machinery, the whole business is now done at once, without discharging or damaging the coal, and at one fourth of the expence: for the boats of the higher level are bodily let down the inclined plane, and are floated from the foot of it through nearly three miles, in a strait line, of the lower level canal, into the open navigation at Worsley: and, whereas they were before obliged to be drawn up to the surface of the earth at great inconvenience and expence, to be repaired at a workshop on Walkden Moor, they now come of themselves, in their course of business, to be repaired at the great dock-yard at Worsley.

'The place where the inclined plane is constructed, is adapted in a singular way for the purpose. There is a bed of white rock, or grit, eight yards twelve inches deep, which dips one in four, lying exactly in the direction most convenient for the communication between the two levels; which bed of rock is hollowed into a tunnel, driven upon the rise of the metals, by blasting with gunpowder, and working it down with wedges and hammers. In this tunnel, formed through a rock reaching from the lower to the higher level, the inclined plane is fixed; and, by its being in the heart of a rock, the whole workmanship can be pinned, secured, and compacted together at the top, bottom, and sides, most effectually:—an advantage which no inclined plane above ground can have, and which renders this a singular production, no where perhaps to be imitated.

'The run of the inclined plane is one hundred and fifty-one yards, besides eighteen yards, the length of the locks, at the north or upper end: and the fall is one in four, corresponding with the dip of the rock.

'Of these one hundred and fifty-one yards, about ninety-four yards are formed into a double waggon-way, in order to let two boats, namely, the empty and the loaded boat, pass up and down; and are divided by a brick wall, supporting the roof, in which are openings for a person to escape out of the way of the boats; which double waggon-way joins in one, about fifty-seven yards from the lower level.

'The whole width of the double waggon-way is nineteen feet; and of the single waggon-way, after the junction, ten feet.

'These waggon-ways are supplied with iron rails, or gullies, laid on sleepers, down the whole run; and the height of the roof, above the iron rails, is eight feet.

'At the top of the inclined plane there is a double lock, or rather two locks, side by side, formed in the heart of the same rock, which deliver the loaded boats from the higher level down the inclined plane, and receive the empty boats from the lower.'—

'The weight of neat coal, contained in the loaded boat, is about twelve tons; the boat weighs about four tons: and the carriage, or cradle, in which the boat is placed, when conveyed down the inclined plane, is about five tons:—in all about twenty-one tons.

'At this inclined plane thirty loaded boats are now let down, with ease, in about eight hours; that is to say, four boats are let down in a little more than an hour. The boats used in these collieries are of different sizes and dimensions; some will carry seven, some eight and a half, some twelve tons.

'The weight of neat coal, independently of the weight of the carriage and boats, which is let down the inclined plane, in twelve-ton boats, in eight hours, will consequently be three hundred and sixty tons. The weight of the carriage, suppose five tons, let down in the same time, will be one hundred and fifty tons; and the weight of the boat, suppose four tons, thirty times down, in eight hours, will be one hundred and twenty tons;—in all six hundred and thirty tons down in eight hours.'

COLONIES *and* TRADE.

Under this head we have also a solitary paper, respecting an undertaking for the accomplishment of which the Society, in 1792, had offered a premium, viz. to discover a passage by land from the North-west parts of Upper Canada to the South Sea, between Nootka Sound and the Straits at Kamschatka; or to the navigable part of any river that disembogues itself into the South Sea, within those limits. This object was accomplished in 1793 by the "open, bold, and brave" Alexander Mackenzie, Esq. who, setting out May 9, from the Peace River, in lat. 56°. 9′ and long. 117°. 43′ West from Greenwich, penetrated to the sea coast of the Northern Pacific Ocean, or to Middleton Sound, in lat. 52°. 23′ and long. 128°. 15′. West, and, commencing his return July 23, by the same route, reached the place from which he had taken his departure, August 24. For this service, the gold medal of the Society was adjudged to Mr. Mackenzie.

Such are the contents of this volume; in addition to which, the Secretary, in his preface, informs us of a most valuable discovery made by the Rev. William Hoskins, of an Iron-Mine in Cornwall, proper for making excellent Steel. We congratulate the country on this acquisition, and on the efforts of this Society to promote useful inventions. We rejoice to find that its funds are in a flourishing state; and that the names of *Ladies* of great merit have recently been added to the list of its members.

Moo.y.

ART. II. *Memoirs of the late Mrs. Robinson*, written by herself. With some Posthumous Pieces. Small 8vo. 4 Vols. 1l. 1s. Boards. Phillips. 1801.

> "*Formam optat modico pueris, majore puellis*
> *Murmure, cùm Veneris fanum videt anxia mater*
> *Usque ad delicias votorum:*"— JUV.

THE memoirs before us present an additional instance of the vanity of such wishes, and of the sorrows which attend indiscreet and unprotected beauty. While loveliness of person excites a thousand favourable prepossessions, we forget the

the dangers to which it exposes the possessor, and are unwilling to think that *Rara est concordia formæ atque pudicitiæ.* Such, however, is the lesson of experience. The fascinating charm of beauty is unfortunately associated with the inexperience and thoughtlessness of youth; and if the enchanting female be unshielded by parental care, or commences her career by an imprudent connection, her future history will excite commiseration rather than envy, and perhaps may be such as virtue would wish to conceal. We are not desirous of commenting on instances of this kind: but when ladies write their own memoirs, we must perform our task with as much mildness and delicacy as possible.

The beautiful, ingenious, and unfortunate Mrs. Mary Robinson has thrown over the present account of herself all the air of a novel. She labours to touch the feelings and to melt the heart of the reader. With the liveliest interest, we accompany her from her childhood in a house near the Minster at Bristol, to her connection with the *Royal Florizel;* and after having perused her solemn avowal, that 'these pages are the pages of truth unadorned by romance,' it would be unfair to doubt her veracity: but, as self-deception casts her veil over the brightest minds, and as it is natural on a review of such a life as that of Mrs. Robinson to attempt to soften the censure (in part certainly unmerited) of the world, and to convert reproach into compassion, it is our duty to remind the reader that it is almost impossible to prevent the *Apologist*, under such circumstances, from invading the office of the biographer. That she had herself a favourable opinion of the effects of these memoirs, in clearing her fame, is evident from the solemn injunction which she imposed on her daughter, Miss Robinson, a few days before her death, to give them to the world. In some respects, these pages will be admitted as a vindication of the fair author. She may have been one "more sinned against than sinning," in her matrimonial connection:—she may not have found the fidelity and affection which she merited;—and it may be very true that 'she was subjugated by circumstances more than by inclination:'—but, though this be the truth, it may not be the *whole truth;* and it would be unjust to her husband to pronounce on her statement without hearing his reply, or that of his friends. It is to be lamented, however, that the narrative written by herself abruptly breaks off in the most interesting part.—Though the child of affliction, and exposed to the severest trials, she asserts that, previously to her attachment to the P—, she had rigidly preserved her matrimonial integrity: but, even if she were acquitted in the court of chastity, some blame must attach, according to her own details, for needless

needless expence, and frequent and dangerous exposure. If she were satisfied with the admiration of her husband, and knew that he was not rich, why did she spend so much in dress; why so frequently resort to public places, and receive the visits of noblemen of libertine characters? Mrs. R. played the part of a *pretty* but not of a *prudent* wife. It is true that she married very young, and was early deceived by her husband: yet in the first overtures of the P—, she seems to have made few scruples, and to have flattered herself with being his declared and acknowleged mistress.

Here, as we are proceeding to the important *denouement*, Mrs. R. ceases to be her own historian (p. 52. of vol. ii.), and the remainder of the memoir, to the period of the fair *Perdita*'s departure from this world of vanity and sorrow, is said to be written by *A Friend*. This continuation is short, occupying no more than 110 pages. The subject of Mrs. R.'s connection with the P— is resumed; and a long extract is given from a letter written in 1783. Her visit to France, after the dissolution of the royal attachment, is also related; and her subsequent connection with Col. Tarleton is mentioned in a note.

Mrs. R. was born at Bristol (her maiden name was Darby) 27th of November 1758, died December 26, 1800, and was buried according to her own direction in Old Windsor churchyard. On her monument, the following LINES, *written by herself*, are now, it is said, *engraven on her monument*.

'O Thou! whose cold and senseless heart
Ne'er knew affection's struggling sigh,
Pass on, nor vaunt the Stoic's art,
Nor mock this grave with tearless eye.

For oft when evening's purple glow
Shall slowly fade from yonder steep,
Fast o'er this sod the tear shall flow
From eyes that only wake to weep.

No wealth had she, no power to sway;
Yet rich in worth, and learning's store:
She *wept her summer hours away*,
She heard the win'try storm no more.

Yet o'er this low and silent spot,
Full many a bud of Spring shall wave,
While she, by all, save ONE, forgot,
SHALL SNATCH A WREATH BEYOND THE GRAVE!'

The promise to publish, solemnly given by Miss Robinson to her dying mother, extended only, we suppose, to that part of the memoirs which is written by Mrs. R. herself; and perhaps it might

might have been as well, had the account of this victim of misfortune been left a mere fragment. Her cup of life was deeply tinctured with bitter ingredients. We admire her genius, we commiserate her sorrows, and we would draw a veil over her indiscretions.—The friend, who has continued her history, has subjoined the following liberal remarks:

'Respecting the circumstances of the preceding narrative, every reader, as influenced by his preconceived habits and opinions, must be left to form his own reflections. To the humane mind, the errors of the unfortunate subject of this memoir will appear to have been more than expiated by her sufferings. Nor will the peculiar disadvantages by which her introduction *into* life was attended, be forgotten by the candid; disadvantages, that, by converting into a snare the bounties lavished on her by nature, proved not less fatal to her happiness than to her conduct. On her unhappy marriage, and its still more unhappy consequences, it is unnecessary to comment: thus circumstanced, her genius, her sensibility, and her beauty combined to her destruction; while, by her exposed situation, her inexperience of life, her tender youth, with the magnitude of the temptations which beset her, she could scarcely fail of being betrayed.

"Say, ye severest——
—— what would you have done?"

'The malady which seized her in the bloom of youth, and pursued her, with unmitigable severity, through every stage of life, till, in the prime of her powers, it laid her in a premature grave, exhibits, in the history of its progress, a series of sufferings, that might disarm the sternest, soften the most rigid, and awaken pity in the hardest heart. Her mental exertions through this depressing disease, the elasticity of her mind and the perseverance of her efforts, amidst numberless sources of vexation and distress, cannot fail, while they awaken sympathy, to extort admiration. Had this lovely plant, now withered and low in the dust, been, in its early growth, transplanted into a happier soil—sheltered from the keen blasts of adversity, and the mildew of detraction, it might have extended its roots, unfolded its blossoms, diffused its sweetness, shed its perfumes, and still flourished, beauteous to the eye and grateful to the sense.

'To represent the character of the individual in the circumstances of his life, his conduct under those circumstances, and the consequences which they ultimately produce, is the peculiar province of biography. Little therefore remains to be added. The benevolent temper, the filial piety and the *maternal tenderness of Mrs. Robinson* are exemplified in the preceding pages, as her genius, her talents, the fertility of her imagination, and the powers of her mind, are displayed in her productions, the popularity of which at least affords a presumption of their merit. Her manners were polished and conciliating, her powers of conversation rich and varied. The brilliancy of her wit and the sallies of her fancy were ever tempered by kindness and chastened by delicacy. Though accustomed to the society of the great, and paying to rank the tribute which civil institutions have

rendered its due, she reserved her esteem and deference for those only whose talents or whose merits claimed the homage of the mind.

'With the unfortunate votaries of letters she sincerely sympathized, and, not unfrequently, has been known to divide the profits of her genius with the less successful or less favoured disciples of the muse.'

Vol. III. contains 14 Numbers of some periodical essays by Mrs. R. called the Sylphid, which appeared in a morning paper, and which, previously to her last illness, she had prepared for separate publication: also the fragment of a novel, intitled Jasper; and the Savage of Aveyron, a poem.

Another poem, in two books, intitled *The Progress of Liberty*, occupies the former part of vol. iv.; and the remainder consists of tributary lines, inscribed to Mrs. Robinson by her different friends, with very few of her own. Three sprightly letters addressed to her by Dr. Wolcot (*alias* Peter Pindar), the last written only eight days before her decease, occur at the end of this miscellaneous contribution.

The verses on *the Progress of Liberty* display richness of imagination, but in some places they are too wild and in others too diffuse. We shall not injure the fame of the writer, however, if we transcribe the conclusion of this posthumous publication. After having surveyed the state of Society on the Continent, her Muse finishes with a picture of her own country:

'Now turn my Muse
To ALBION's plains prolific: where serene,
Temper'd by REASON, Liberty delights
To warm th' enlighten'd mind! Where, since the days
When her bold Barons ratified their deed,
Freedom has smil'd triumphant and secure.
Oh! favour'd Isle, long may discordant broils
Be sever'd from thy shores; may howling war
Blow its dread blast, far, ALBION, far from thee,
While thy white ramparts tow'ring o'er the waves,
Shall bid thy foes defiance! Here the hind
Enjoys the well-earn'd produce of his toil,
And sleeps secure, protected by those laws
FORM'D FOR THE PEASANT AND THE PRINCE ALIKE.
Still may thy infants, Albion, instinct taught,
Prattle of Liberty: the sun-burnt swain,
As slow the flaming torch of day retires,
Sing the loud strain of freedom and of joy.
Still may no wrongs invade his midnight dreams,
No guilty wish contaminate his will,
To violate the laws: for 'tis the sting
Of keen oppression, that engenders crimes,
And brutalizes man. The rav'nous wolf
Feeds not upon his kind,—his murd'rous will

Being

Being but instinctive. Lions prowl abroad,
Famish'd and watchful of the desart path
Where the lone traveller passes: on his kind
He scorns to fatten: none but THINKING MAN
Preys on his species; sheds his brother's blood,
And while opposing, still oppos'd, derides
The pleading tongue of Nature. Let the brave
Turn to the clay-built hovel of Content,
Where Peace and Reason consecrate the toils
Which Virtue's sons endure: See! at their door
No shiv'ring pilgrims wait the murd'rous glance
Of scowling Superstition. No dark fiend
Dashes the frugal cup with terror's gall,
Or from the fever'd lip, with churlish hand,
Snatches the cooling draught. No bigot wrath
Starves the poor sinner into faith; or steals
From fainting toil that wholesome nourishment
Which Nature meant for all, nor marked the day
Nor hour of recreation. ALBION! still
May thy brave peasantry indignant turn
From priestcraft, ignorance, and bigot fraud,
To view in Nature's wonders, Nature's GOD!
For where can man so proudly contemplate
Th' OMNISCIENT's pow'r, as in the tablet vast
Of infinite creation? Ev'ry breeze
Seems the soft whispering of Nature's voice
Fraught with the lore of Reason. Ev'ry leaf
That flaunts its vernal hue, or eddying falls,
Its fibres wither'd by autumnal skies,
A moral lesson shews. The rippling rill
Prattles with Nature's tongue. The ev'ning gale,
Moans the decline of day: while Twilight's tears
Fall on the dusky wings of chilling Night,
Spreading to hide its triumphs. The vast dome
Gleams with unnumber'd stars; the prying eyes
Of those bright centinels, etherial borne,
That watch the sleep of Nature. O'er the main,
In ebon car ærial, lightning wing'd,
The pealing thunder whirling his vast flight,
A short-liv'd fiend, gigantic born, the son
Of Equinox, rides furious. The free'd winds
Howl as he passes by. The foamy waste
Bounds with convulsive horrors; while the waves
Lash the loud-sounding shore. O! Nature's GOD!
These are the varied pages of that lore
Which REASON searches: These the awful spells
That seize on all the faculties of man,
And bind them to allegiance. For THAT POW'R
Which speaks in mighty thunder wakes the soul,
Breathing in balmy gales; is seen alike
In the swift lightning and the ling'ring hue

Of

Of Ev'ning's purple veil; looks thro' the stars
And whispers 'mid the solitude sublime
Of thickening glooms nocturnal; from the east,
Flames forth his burning eye: the grateful earth
Welcomes his glances with her boundless stores,
And robes herself in splendours: odours rich
And colours varying decorate her breast,
To greet the Lord of Nature: forests wild
And oceans multitudinous unfold
Their wonders to his gaze! Then why should Man
Creep like a reptile, fearful to explore
The page of human knowledge? Why mistrust
The sensate soul, the faculty supreme
Which instinct wakens? REASON, pow'r sublime!
Accept the strain spontaneous, from the MUSE
Which nurs'd on Albion's cliffs, delights to sing
Of LIBERTY, and thee, her ALBION's boast.
And tho' no flight sublime shall grace her toil,
No *classic* lore expand her thinking mind,
Prophetic inspiration, rapt, shall pour
This mystic oracle. The pendent globe
Shall greet, with pœans loud, the sacred claim
To Britain's sons, by REASON ratified;
And when the God of Nature, "trumpet-tongued,"
Shall check the fiery steeds that hurl the car
Of shouting Vict'ry, Time shall trace her course
On the proud tablet of eternal Fame;
And Nature, tow'ring 'mid the wrecks of war,
Shall bless her ALBION's shores, which grandly lift
Their rocky bulwarks o'er the howling main,
Firm and invincible, as ALBION's sons,
The sons of REASON! UNAPPALL'D and FREE!'

The other pieces by Mrs. R. are—an Answer to a copy of verses by P. Pindar, Esq.; Stanzas, with an Answer, by James Bowden, Esq.; Lines, with an Answer, by the Same; Stanzas, after melancholy Dreams, to the Poet Coleridge; Extempore, sent with a Pair of Gloves to S. J. Pratt, Esq.; the Old Beggar, the Old Shepherd, and the Haunted Beach. The incident which gave rise to this last poem is narrated in vol. ii. of the Memoirs, p. 121—124. In these effusions of Mrs. Robinson's Muse, we generally meet with great ease and elegance of versification, while her sentiments display an amiable and benevolent heart.

If we were to review the title-page of these volumes, we should say that it does not contain a fair specification of their contents. Since the memoirs written by Mrs. R. occupy so small a space, the words of the title ought to have been inverted, thus: *Some posthumous pieces of the late Mrs. Robinson; to which are prefixed Memoirs, partly written by herself.*

ART.

Moo-y.

ART. III. *Fragments of the Natural History of Pennsylvania.* By Benjamin Smith Barton, M. D. &c. &c. Part First. Folio. pp. 30. 4s. Printed at Philadelphia. Sold in London by Robinsons.

THE lovers of natural history will be gratified by the information contained in this number of a work that promises to extend our knowlege, in some important respects. The observations on the connection between the emigration of birds, and the progress of the seasons, are peculiarly interesting; and they are more striking, because they are laid before us in the form of tables. Dr. Barton says, in the introduction:

'From an inspection of these tables, it will appear, that the Alauda alpestris, or Shore-Lark, the Alauda rubra, or Red-Lark, the Fringilla tristis, or Golden Finch, and some others, were not observed, in the vicinity of Philadelphia, earlier than the twelfth of March, 1791: whereas the same birds were seen, in the same neighbourhood, as early as the twenty-eighth of February, the following year, on their passage northward.

'I have placed the Anas canadensis (Wild Goose) between the 15th and the 18th of April, 1791; but in the year 1794, these birds were observed, on their migration from the south, as early as the 3d of March. In the first mentioned year, the Ardea Herodias, or Great Heron, was not observed before the 15th or 16th of April; but in the latter year, numbers of these birds were seen as early as the 1st of April. Many other instances might be mentioned.

'How much the movements of birds from one country to another depend upon the state of the seasons, will appear from different parts of this little work; particularly from the third section. Here we find, that during our mild winters, several of those species of birds which, in general, are undoubtedly migratory, continue the winter through in the neigbourhood of Philadelphia. Such, which I have denominated the OCCASIONAL, or ACCIDENTAL, RESIDENT BIRDS, are the Ardea Herodias, or Great Heron, Columba carolinensis, or Turtle-Dove, the Fringilla melodia, and several others: I doubt not many more than I have mentioned. The Columba migratoria, Passenger-Pigeon, commonly returns from the northward late in the fall, and continues with us a few days, or weeks, feeding in our fields upon the seed of the buckwheat, or in the woods upon acorns. But if the season be a very mild one, they continue with us for a much longer time. This was the case in the winter of 1792—1793, when immense flocks of these birds continued about the city, and did not migrate farther southward, untill the weather became more severe in the month of January. The winter of 1792—1793, was one of the mildest that had ever been remembered in Pennsylvania. It is a common observation in some parts of this state, that when the Pigeons continue with us all the winter, we shall have a sickly summer and autumn. There is, perhaps, some foundation for this notion.—Large bodies of these birds seldom do winter among us unless the winter be very mild; and the experience of some years has taught us, that such winters are often followed by malignant

malignant epidemics. The mild winter of 1792—1793, was succeeded by a dreadful malignant fever, which destroyed between four and five thousand people in Philadelphia; and I am assured, that the same fever in 1762 was preceded by an extremely open winter, during which the pigeons remained about Philadelphia, and in other parts of the state. In the hands of a poet, a Lucretius, or a Virgil, this coincidence between the accidental hiemation of the pigeons and the appearance of the yellow-fever might be wrought up into a system of beautiful extravagance.'

Dr. B.'s remarks on this curious subject will be found new and interesting, and to us they appear decisive. He observes, on the migration of quadrupeds:

'We see that quadrupeds and some other animals do occasionally, during severe winters, migrate to more southern climates. I am assured, that the bears migrate, in great numbers, every autumn, across the Mississippi, going south (perhaps to the mountains of New Mexico), in search of a milder climate. In the spring, they return again by the same route. This migration of the bears is particularly observed at Manchac, on the Mississippi, about the latitude of ——. Many other quadrupeds perform similar migrations, both in the old and in the new world.'

Those birds which have been found in a torpid state, Dr. Barton supposes to be stragglers, left behind by their fellows.

The emigration of several American birds to Europe, and their return to the new world, are curious facts, which have never before been placed in a clear light:

'My learned and candid friend Mr. Pennant (whose name I never mention but with pleasure and with gratitude; whose works have contributed much to my information, and whose example has stimulated me to the study of natural history) thinks there is the "greatest probability" that numbers of the birds of Kamtschatka are common to North America, "and that they pass there the seasons of migration." I may observe, on the other hand, that it is likely that many of the North American species pass into Asia and Europe, making between these continents and the new world regular migrations. I think (for I write from memory) that it is Professor Biseke who has lately shown, that several of the North American birds annually visit the neighbourhood of Mittau, in Courland. Among others, I particularly recollect that this writer mentions the Loxia Cardinalis, or Cardinal Grosbeak. In the farther investigation of the subject of the migration of birds, we shall discover, that many species (many more than is generally imagined) are common to the old and to the new world; and that several species are occasionally passing into countries which before they had not visited. I am not afraid, that genuine naturalists will suppose, that the regularity of migration, which I have mentioned, between the two continents, is altogether imaginary. I certainly do not carry my birds as far, in search of food, of resting places, and of better climes, as did Cotton Mather, of New England, who fancied that the wild pigeons,

pigeons, on leaving us, " repaired to some undiscovered satellite, accompanying the earth at a near distance."

Dr. Barton's tables are divided into columns, containing the progress of vegetation, the state of the thermometer, &c. with the birds of passage at different seasons. The resident birds, and the occasional visitants, are afterward enumerated.

This number closes with some curious remarks on the *usefulness* of particular species. Among other passages, the author says:

' As a devourer of pernicious insects, one of the most useful birds with which I am acquainted, is the House-Wren, or Certhia familiaris. This little bird seems peculiarly fond of the society of man, and it must be confessed, that it is often protected by his interested care. From observing the usefulness of this bird in destroying insects, it has long been a custom, in many parts of our country, to fix a small box at the end of a long pole in gardens, about houses, &c. as a place for it to build in. In these boxes they build and hatch their young. When the young are hatched, the parent birds feed them with a variety of different insects, particularly such as are injurious in gardens. One of my friends was at the trouble to observe the number of times that a pair of these birds came from their box, and returned with insects for their young. He found that they did this from forty to sixty times in an hour; and in one particular hour the birds carried food to their young seventy-one times. In this business they were engaged the greater part of the day; say twelve hours. Taking the medium, therefore, of fifty times an hour, it appeared that a single pair of these birds took from the cabbage, sallad, beans, peas, and other vegetables in the garden, at least six hundred insects in the course of one day. This calculation proceeds on the supposition, that the two birds took each only a single insect each time. But it is highly probable they often took several at a time.

' The species of Certhia of which I am speaking generally hatches twice during the course of the summer. They are very numerous about Philadelphia, and in other parts of the United States.

' The fact just related is well calculated to shew the importance of attending to the preservation of some of our native birds. The esculent vegetables of a whole garden may, perhaps, be preserved from the depredations of different species of insects by ten or fifteen pair of these small birds; and independently of this essential service, they are an extremely agreeable companion to man: for their note is pleasing. A gentleman, in the neighbourhood of Philadelphia, thinks he has already reaped much advantage from the services of these wrens. About his fruit-trees he has placed a number of boxes for their nests. In these boxes they very readily breed, and feed themselves and their young with the insects, which are so destructive to the various kinds of fruit-trees and other vegetables.'

These and similar facts lead the author to speak of a subject of great importance in political œconomy; viz. the increase of

destructive insects in the United States. The insect denominated the Hessian Fly is considered by Dr. B. as a native of America: but, he observes, it could not have originally inhabited wheat, rye, and other gramina, because those vegetables are not indigenous in America. The Pea-fly is another of these spoilers; and,

'The Caterpillar, which has begun its ravages upon the leaves of the Lombardy Poplar, that contributes so much to beautify our city, is most probably a native of our woods. It prefers this fine foreigner to the less palatable leaves upon which it has been formerly accustomed to feed. Other instances of this kind might be mentioned. They shew how very necessary it is to watch the migrations of insects from the native to the introduced vegetables; and they teach us a truth, not I think sufficiently attended to by naturalists, that different kinds of insects are much less confined to vegetables of the same species, or to species of the same genus, than has been commonly imagined. It is certain, that the same species of insects, in America, often feeds indiscriminately, and in succession, upon plants of very opposite genera, and even of very different natural orders.'

From the important matter contained in this specimen, and the agreeable manner in which Dr. Barton writes, we are led to form considerable expectations of the remainder of the work; and we trust that it will meet with sufficient encouragement to engage the ingenious author in its prosecution.

Fer.

ART. IV. *The Institutions of the Practice of Medicine;* delivered in a Course of Lectures, by Jo. Baptist Burserius, de Kanifeld. Translated from the Latin, by William Cullen Brown. In Five Volumes. Vol. I. 8vo. pp. 549. 8s. Boards. Edinburgh, Mudie; London, Robinsons. 1800.

THIS extensive work, of which we have only the commencement before us, is intended to afford a comprehensive view of the principal facts and doctrines relating to medical science. It partakes, necessarily, of the defects of a series of lectures, in proving too copious for readers who look for applicable knowlege in books; and in containing many discussions which are useful only to students, just entering on the elements of the art. Even to this class of readers, in England, the examination of some opinions canvassd by Dr. Burserius will appear superfluous; such as the theoretical notions of Boerhaave, Etmuller, &c. which the advanced state of medical science here has consigned to neglect, and nearly to oblivion. The fate of Boerhaave, as a writer, may indeed serve as a beacon to all who delight in theorizing. Many living practitioners can remember the period when his authority, in matters of opinion,

was

was unquestioned: when his Aphorisms formed the basis of inquiry; and when he was venerated almost superstitiously by the whole profession. What remains now of his mighty reputation? His Pathology is disregarded; his Therapeutics are discredited; and even his well-earned fame in Chemistry is obscured by the amazing revolution in that branch of science. The memory of his virtues alone continues unfaded: as a Christian and a moralist, he yet maintains the rank of *Princeps Senatûs;* and the example of the man may still be held out to those who would reap little advantage from the labours of the Professor.—It is useful, however, occasionally to take a station from which we can descry our actual progress in knowlege; and works like the present are not without their recommendations, when they present to our view the state of general opinion among the members of the profession, in other countries.

This first volume opens with a 'short commentary on Inflammation.' After having criticized the principal doctrines which have prevailed on this subject, the author advances his own theory; viz. that inflammation is excited by a stimulus, and that its phænomena may be explained on this supposition. Among the stimulants capable of producing inflammation, he admits *acrimony of the blood*; and he enters into a discussion of some length respecting the appearance of the buffy coat, or blood drawn under certain circumstances, which he refers to an increased quantity of coagulable lymph, and a stronger attraction between the red globules for each other. Perhaps, he has scarcely made sufficient allowance for the changes produced by the greater or less velocity with which the blood flows from the vein.

The Lecturer next makes some judicious remarks on those states of inflammation, which, in this country, are distinguished by the titles of *active* and *passive*. The former he supposes to depend on arterial, the latter on venous inflammation.

The Prognostics and Cure of Inflammation contain nothing peculiar. The language of the antient Pathology is very discernible in this part of the work; and the author treats of the cure by *derivation* and by *revulsion*, though modern practitioners pay no regard to those contested distinctions.

In discussing *Fever in general*, Dr. Burserius examines, at considerable length, the opinions of preceding writers, respecting the definition and the proximate cause of fever; and he rejects them all:—substituting for a definition, a particular description of the symptoms of fever; and supposing that the cause depends on a change in the qualities of the circulating fluids, combined with a spasmodic state of the muscular fibres in the containing vessels.—The *end* of febrile agitation is, in

his opinion, the expulsion of morbific matter from the system: but this notion was exploded by Dr. Cullen, and is become entirely obsolete among medical men in this country.

Speaking of the remedies of general fever, the author condemns the mode of exhibiting tartar emetic, which is commonly practised by English physicians:

'At two meetings of the Royal Medical Society, the one held January 15, the other February 4, 1782, the celebrated Majault, Morisot, Deflandes, Desessartz, and Tenneurius, brought forward many instances of the bad effects of tartar emetic exhibited in this way. And, in short, all of them learnt by long experience, that this remedy promotes corruption of the fluids, as appeared from the very fetid smell of the feces, which is sensibly perceived on the days when that remedy is employed, and that concoction and the true crisis are impeded by it. Desessartz moreover has added that, after he had desisted from the use of this remedy, for fourteen years, he had observed with great pleasure diseases commonly putrid, and likewise malignant ones, terminated more quickly and regularly; and Tenneurius has made the same assertion In a conversation with my friend and former pupil, Jo. Bapt. Cambieri, a physician of the highest expectations, I was lately informed that he had perceived the fetid smell mentioned by the Parisian Academicians, not only in the feces, but likewise in the urine and sweats, when he employed the same remedy; but that he had observed it to be diminished; nay altogether removed, on the days when it was omitted. Vid. Journ. de Med. tom. lvii. p. 274.'

We apprehend, however, that no such effects have occurred to English observers. We have used this remedy in many cases of fever with advantage; and we never found any inconvenience attending it, excepting the irritability which is sometimes excited in the stomach, if the employment of the antimonial be continued too long.

Like Dr. Cullen, the present Lecturer divides fevers into *continent*, *continued*, *remitting*, and *intermitting*.—A good view is given of the varieties and symptoms of intermittents. In treating of the causes, the principal theories on the subject are examined; and some pains are bestowed on the humoral pathology, which the author combats. His remarks are judicious, but they would not be new to our readers.—Respecting the method of cure, we meet with nothing particularly interesting. The author has omitted to notice the use of arsenic in intermittents, which has been sanctioned by the experience of many of our practitioners. The varieties of intermittents are distinctly treated, at some length: but the distinctions, we apprehend, are in many instances more curious than useful.

Under the head of *continent Fevers*, Dr. B. has, in like manner, considered several varieties which are not objects of practice in the present age, and which it might have been sufficient to

have simply indicated to his students. The humoral pathology is here again conspicuous.—Excepting these instances, we have nothing to remark on the history and cure of the Synochus and Typhus, which are accurately collected from the best writers;—and we may apply the same observation to the history of hectic Fever, with which the volume is concluded.

This compilation may be regarded, on the whole, as valuable, but as especially calculated for students on the continent; where it might hold a middle place between the supporters of the antient humoral doctrines, and the admirers of the Brunonian system, who depart equally from the path of useful observation. The translator might adapt it better to English readers, by retrenching the exuberance of the theoretical discussions; and in some places, the opinions expressed by the author on points of practice might be properly corrected by notes. The bulk of the work, which is a considerable objection to its circulation, would then be judiciously lessened; and important additions to the text might occasionally be made, by referring to the experience of medical men in our own country.

Fer.

ART. V. *A Journey from London to the Isle of Wight.* By Thomas Pennant, Esq. 2 Vols. 4to. 3l. 3s. Boards. Harding. 1801.

THE labours of this ingenious naturalist and tourist have often gratified our curiosity, and afforded us an agreeable relaxation from more serious occupations. He is now deceased; and we receive this publication as we would accept the legacy of an old companion, the recollection of whose gaiety and kindness is mingled with regret. The inhabitants of this country are indebted to Mr. Pennant for much of that proper spirit of *home-travelling*, which is now prevalent among us. His manner of writing was well calculated to produce such an effect; for he was not one of those "who can travel from Dan to Beer-sheba, and cry it is all barren:" he had the art of forming discussions of an interesting kind, in the most beaten paths.

The present work contains a description of a road so often travelled, and of places so generally known, that its sources of amusement might be supposed to be exhausted; yet we are here presented with much entertaining matter. The title-page, indeed, does not convey a sufficient idea of the direction and extent of the journey recorded in these volumes. Mr. Pennant's route lay down a part of the Thames, then to Rochester, Feversham, Reculver, Margate, Deal, Dover, and along the Southern Coast to the Isle of Wight. His manuscript, as we learn from an Advertisement prefixed to the second volume, was designed to comprehend a tour from London to the *Land's*

End, but it is complete no farther than as it now appears. The editor, however, intends to publish a third volume, in order to finish Mr. P.'s original plan; and 'he is authorized to inform the public that the undertaking will be assisted by all the information which can be derived from a gentleman who accompanied Mr. Pennant during the tour, who assisted in his researches, and was acquainted with his opinions and intentions.'

The tour itself, which forms a part of Mr. P.'s great manuscript work intitled *Outlines of the Globe*, originated in the following laudable motives, as related by the venerable author:

"My son had returned from his last tour to the Continent, so much to my satisfaction, that I was determined to give him every advantage that might qualify him for a second, which he was on the point of taking over the kingdoms of France and Spain. I wished him to make a comparison of the naval strength and commercial advantages and disadvantages of our islands with those of her two powerful rivals: I attended him down the Thames, visited all our docks, and, by land, (from Dartford) followed the whole coast to the very Land's End."

G. 2. It is much to be wished that our youthful travellers, in general, should be made equally well acquainted with their own country, before they visit others.

From the first volume, we shall quote the account of the Gun-powder Magazines at Purfleet. It contains, however, some reflections on the great Dr. Franklin, which do no credit either to the information or the liberality of the writer; and an attack on his philosophy which the very note subjoined proves to be unfounded:

D°. 'We landed at the tremendous national magazines of gun-powder, erected here about the year 1762. Before that time, they were at Greenwich, which was thought to be too near our capital. They consist of five large parallel buildings, each above a hundred and sixty feet long, and fifty-two wide, five feet thick, arched beneath the slated roof; the arch is three feet in thickness, and the ridge of the roof covered with a coping of lead twenty-two inches broad. The building was reserved for the reception of the barrels of powder brought out of the magazines, in order to be tried in the proof room, to which there is a passage with a railed floor, covered on the bottom with water; so that, should any grain drop, no accident could set them on fire. At present this building is disused, all the experiments being made in the open air, and in the musquetry, or artillery, to the use of which it is destined. All these buildings are surrounded, at a distance, with a lofty wall. In the two outmost is kept the powder, in small barrels, piled within wooden frames, from the bottom to the roof; and between the frames is a platform of planks, that the walkers may go in without fear of striking against any substance capable of emitting a spark. As a farther security, those who enter this dreadful place are furnished with goloshoes and a carter's frock. Nothing of iron is admitted, for fear of a fatal collision. The doors

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are of copper, the wheels of the barrows are of brass. The four buildings usually contain thirty thousand barrels of a hundred pounds weight: should an explosion take place, London, only fifteen miles distant, in a direct line, would probably suffer in a high degree. The dread of such an accident by lightning, struck the Board of Ordnance so forcibly, that, in 1772, it consulted the Royal Society on the most effectual method of preventing it. A Committee from the Society was appointed, who determined on fixing conductors: such were set up with unusual precaution. These were on the principle advised by Dr. Benjamin Franklin: the very same philosopher, who, living under the protection of our mild government, was secretly playing the incendiary, and too successfully inflaming the minds of our fellow subjects in America, till the great explosion happened, which for ever disunited us from our once happy colonists. On May 15th, 1777, the inefficacy of his pointed conductors was evinced. Lightning struck off several pieces of stone and brick from the coping of the Board House, which stands at a small distance from the Magazines; neither the conductor on this house, or any of the others, acted; but Providence directed the stroke to that alone: the mischief was very trifling. Mr. B. Wilson had very ably dissented against the method proposed by Dr. Franklin; but the evil genius of the wily philosopher stood victorious; and our capital narrowly escaped subversion *. At present, these important Magazines are made as safe as human wisdom can contrive. The house in question is a handsome plain building, and is called the *Board House*, from the use made occasionally of it by the Board of Ordnance. It commands a fine view up and down the River, and the rich gentle range of hills in the county of Kent.'

We insert the description of Richborough Castle, as one of the best accounts which we have seen of that curious monument of antiquity:

'Richborough Castle stands in the parish of Ash, on the east side of the village, on the edge of a lofty slope, once washed by the sea: at present the Stour passes beneath its base.

'The form is rectangular. Most of the walls remain; are very thick, strong, and lofty; and the cement now so hard as to baffle the efforts of those who have lately endeavoured to destroy them. The materials are great pebbles, flint, chalk, &c. bedded in the mortar, which consists of lime, sea shells, broken tile, and small pebbles. The pieces of chalk were taken by the Romans from the foot of the adjacent cliffs, and have the pholades remaining entire in their cylindrical cells. The whole was faced with square stones, perhaps Purbeck, and, as usual, had tiers of tiles at certain distances, two tiles thick: the square scaffold holes remain.

'The foundation of the wall is pit-sand, flint, chalk, twice repeated, flints lodged in mortar, and lastly, a stratum of mortar. The thick-

* 'A reason was assigned for this disaster; for, on inspection, it was found to be owing to a want of construction in the metallic conductor. See Phil. Trans. vol. lxviii. p. 232.'

ness at the base is eleven feet three inches, but at the height of a few feet, ten feet eight inches. The length of the south wall, on the outside, is 358 feet; of the west wall, 490 feet; of the north wall, 560 feet. The north wall, in its most perfect part, is about 25 feet high: it ran down the slope, towards the sea, and reverted for the space of about 190 feet along a natural terrace, and ceased where the terrace ceased, and the bank became inaccessible. Vast fragments of the wall are fallen down the slope. The west entrance is laid with large squared stones, stratum super stratum. Near this place, in the north-west corner of the Castle are found snags of stags horns sawed off; boars tusks; oyster shells in abundance; and the exuviæ of other animals: the whole area is considerably above the external ground, and consists of rubbish interspersed with thin layers of mortar. In the north wall, on the outside, is the foundation of a square tower, and there are marks of four more in different parts of the walls. Their situation is pointed out by a particular arrangement of round holes lined smoothly with mortar penetrating many feet into the substance of the wall, but no where pervading it.

'The *porta ducumana* is beneath a tower in the north wall, through which the entrance into the Castle is in an oblique direction.

'In the area of the Castle has been lately discovered a platform of solid masonry, in form of a parallelogram, the sides of which are 144 feet by 104; the depth five feet. It is a composition of large flint stones and coarse mortar. On its surface are remains of a superstructure in the shape of a cross, (which has been faced with the squared stones,) rising somewhat above the ground, and more than five feet above the platform.

'A wharf, or landing place, was discovered some years ago in the plain at the foot of the slope about forty roods northward of the Castle, about four feet high, of a triangular form, one of the sides parallel with the bank, and its opposite angle projecting towards the sea; the sides were nearly equal, of about ten feet each. It was a shell of brick work, two bricks thick, filled with earth, the two projecting sides tied together with a brace of the same material. Two sorts of brick were used in this building; one was 18 inches by 12, and three inches and a half thick; the other 17 by 11, and one and a quarter thick. Mr. Ebenezer Mussel, of Bethnel Green, near London, purchased the whole quantity of materials, and employed them in paving a court yard, and part of his house.

'The Amphitheatre lay on the north side: its form is destroyed, but the vast hollow marks the place.

'Multitudes of antiquities have been discovered in and about the castle; such as urns, coins, fragments of earthen ware, marble mouldings, and brazen figures of Mercury, and of a Bagpiper. The last represents a soldier armed in his helmet playing on the bagpipe, with the pipe in his mouth, and the bag, which is very large, placed almost before him, and pressed with both arms. I have in my voyage to the Hebrides, p. 347, given a full history of the use of this instrument at different periods.

'Richborough has a most advantageous prospect, which might be one reason for fixing on this situation. It commands all the way from

from the North to the South Foreland, and all the harbour in which it stood, so that no fleet or vessel could escape its observation.'

The origin of the Godwin-Sands is thus explained in a very ingenious and probable manner:

'Perhaps a natural solution may be as credible as the fabled stories: we may ascribe it to the vast inundation which A. D. 1100 overflowed part of Holland, so that the water being carried from this part of the sea rendered it so shallow that places which might have been safely passed over before now became full of dangerous shoals. Such was the case here: the Godwine sands were two sub-marine hills, in ancient times unnoticed by reason of the depth. After this drainage their heads at the ebb tides appeared above water, and became most dangerous to mariners: yet they have their utility—ships anchor or moor beneath their shelter, and the little they receive from the North and South Forelands, and find protection from the winds, unless in very extraordinary tempests; such was the fatal one of November 1703. It began five hundred leagues from the English coast, and hurried the homeward-bound ships, which happened to be in the Atlantic, with amazing impetuosity up the channel, and as it were swept the ocean and filled every port: no ship that did not go direct before the wind could live. It passed over England, France, Germany, Sweden, Finland, Russia, and part of Tartary, and spent itself amidst the islands of ice in the Frozen Sea. I refer to a most ample relation of its dire effects by sea and land, given in the City Remembrancer, vol. ii. from p. 43 to 187: its height was in the night of November the 26th, but it lasted with incredible fury fourteen days. That dreadful night was uncommonly dark, and made more hideous in many places by the quick coruscations of lightning and the singular glare of meteors and imaginary symptoms of earthquakes, while the rolling of the thunder and the howling of the winds formed the terrific diapason.'

Hastings, in Sussex, is now become a place of fashionable resort, for sea-bathing: but it has till lately been of little note, and has therefore not received much attention from writers. Mr. Pennant gives this account of it:

'We descended a long and steep hill to Hastings, a town crowded in a narrow gap between high hills, open to the sea; a wild port, without even the shelter of a pier. The Conqueror made this place his first day's march, after landing at Pevensey; staid here fifteen days to refresh his troops, collect provisions, and gain a knowledge of the country; he drew his ships on shore, to take from his army all hopes of retreat, and left them under the protection of forts. He added Hastings to the number of the cinque ports, and it enjoyed all the privileges: the number of ships which it sent out for the use of the State was only five; but with its dependent ports, twenty-one.

'This, I imagine, was, after the Conquest, a common passage to Normandy; for one Matthew de Hastings held the manor of Grenocle, in this county, of the King, by the service of finding an oar

oar whenever the King passed over the sea at the haven of Hastings.

'The Editor of the Saxon Chronicle imagines that a Danish pirate, Hastingus, who used to land here on his plundering expeditions, gave name to the place; and being accustomed to build small castles wherever he went for these purposes, it is highly probable that the present was built on the site of one of his rude fortresses. It stands on a steep cliff above the sea: no part is entire; all that remains are disjoined walls, and vast fragments scattered over various parts of the base: it is divided from the main land by a vast foss a hundred feet broad, and there are two others on the eastern side. Over the beach hangs a projection separated from the castle by another foss. This seems to be the site of one of the Danish forts of the pirate Hastingus.

'Hastings was certainly a flourishing town long before the Norman invasion: it appears that King Athelstan, who reigned between the years 925 and 942, had here a royal mint.

'After the Conquest, William bestowed Hastings, and the whole rape or hundred which bears that name, on Robert Earl of Eu, descended from a natural son of Richard I. duke of Normandy. This town gave name to the great Family of the Hastings, afterwards Earls of Huntingdon. The first was Robert, portgreve of the town, and steward to the Conqueror. They flourished from that time till the death of the last in 1789.

'The churches are St. Clement's and All Saints; the first with a tower of neat tesselated work. The priory of Austin Canons stood behind the castle; not a vestige of the building is to be seen: it was founded, as is said, by Sir Walter Bricet, in, or perhaps before, the time of Richard I. The original building was washed away by the sea, and afterwards replaced on its late site.

'In this town is a small manufacture of thin silks; but its chief support is its fishery of herrings, mackarel, and soles. The first begins in November, and lasts till Christmas: about forty boats are employed, and about two hundred men, who go out four or five leagues to sea during the season. The mackarel and soles are sent to London in fish-carts.

'Near the castle are some lime-kilns of a most magnificent size and structure. The lime is no small article of commerce, and made of the chalk brought from Beachy-head, in boats of from thirty to forty tons burden.

'The cliffs along this coast, from the west side of Winchelsea to Hastings, consist of shingle, with a high beach at their base; that on which the castle stands, of a sand stone mixed with shingle, split into fissures and vast gaps. The view towards Beachey-head is of a great curvature, with a high beach; the land near the shore flat, but rising, four or five miles inland, into lofty downs.'

G. 2.

In the notice of Portsmouth, we were much pleased with the following passages:

'We sailed amidst the glorious defenders of our country. Were I a King of England, I would never receive an Ambassador with any solemnity

solemnity but in the cabin of a first-rate man of war: there is the true seat of his empire!

'This harbour may boast of being capable of receiving the whole Navy of England. Secure from every storm, the greatest first-rates may ride there at the lowest ebbs without touching ground: they can take in their stores and guns while they are at anchor, and get out of harbour in a quarter of an hour's time, without impediments of bars or sand-banks, in the deep water beneath South-sea Castle. The approach to the harbour is said to be impregnable, by reason of the various forts or batteries close to the water edge. On the Gosport side are Charles-fort, James-fort, Borough-fort, Block-house-fort, and another lately erected in Stokes-bay. Monkton-fort, on the point next to Stokes-bay, I think had once the name of Kicker-gill, or Gill kicker, (I do not know which;) redoubts which lay, one on one side, the other on the opposite part of the entrance.

'I dropped a sigh beneath the stern of the Victory, dragged sullenly from offered glory *, and blushing afterwards at the satire of undeserved thanks.

'The Formidable, taken from the foe, bravely contesting with numbers the trophy of the gallant Hawke; since the scape-goat of a factious Admiral, Time and Truth vindicating the fame of her veteran Commander. Hercules and Hydra typically adorn her prow, allusive to his cruel injuries:

'Diram qui contudit hydram
Comparit invidiam supremo fine domari!

'I pass by numbers of other ships, through ignorance of their story. Now appear before me the unfortunate Ardent, added to our Navy by the bravery of one Commander, and lost, for a time, by the imprudence of another; the Guipuscoa, a Spanish sixty-four, one of the first fruits of Sir George Rodney, on January 8, 1780, in the last period of his fortunate life; the Princessa another (the name now changed,) a lee-shore prize, taken in a tempest with several others, within eight days distance—so rapidly did victory press on this her favoured child; the St. Michael, another of Fortune's gifts, blown by a furious storm from the midst of the besieging fleet, to the invincible garrison of Gibraltar; finally, the French Monarque, and the French Prothee, in defiance of all the mutability of that marine Deity, became the captive of the vigilant Digby. Numbers of others I could enumerate, eulogies of living commanders, or cœnotaphs of departed heroes.'

This proud list would now require much greater space and labour for its completion.

The reader of this work will find that, besides the miscellaneous entertainment which it affords as a book of travels, it is occasionally diversified by inquiries and details which will gratify the Antiquary and the Naturalist. Of its researches into antiquity, indeed, our extracts have already afforded some specimens.

G. 2.

'* Lord Littleton's Letters.'

The volumes are ornamented with above forty elegant engravings. The first contains, among other plates, views of the Temple Stairs, Trinity Hospital, Deptford, Norfolk Hospital, Greenwich, Perry's Dock, Charlton Manor House, Lesney's Abbey, Tilbury Fort, Rochester Castle and Bridge, Feversham Abbey, Reculver, Dent de Lion, North Foreland Lighthouse, St. Augustine's Monastery, at Canterbury, Deal, Walmer, and Dover Castles, the antient Chapel and Tower in the latter, Maison Dieu, and Shakspear's Cliff. The second volume presents views of Sandgate Castle and Town, Winchelsea Church, Hastings Castle, Battle Abbey, Pevensey Castle, Newhaven, the Pavilion at Brighton, New Shoreham, Arundel Castle, Chichester, Emsworth, Warblington, Cowes and Carisbrook Castles, St. Catherine's Tower, St. Catherine's Point, and Yarmouth in the Isle of Wight.

An account of a Northern Journey, from Downing to Alston Moor, performed by Mr. Pennant, has been intrusted by his son to the editor of the present work, and has lately made its appearance in print: but we have not yet seen it.

G.2.

Fer.

ART. VI. *Observations on the Medical and Domestic Management of the Consumptive;* on the Powers of Digitalis Purpurea; and on the Cure of Schrophula. By Thomas Beddoes, M.D. 8vo. 7s. Boards. Longman and Rees. 1801.

IN pursuance of his philanthropic attempts to abridge the catalogue of incurable diseases, Dr. Beddoes now offers to the public some additional remarks on the treatment of pulmonary consumption. It would afford us the most cordial satisfaction, if we could add that he had demonstrated the success of the methods of cure suggested by him: but, unfortunately, this cannot be affirmed. The first plan proposed in the present volume is the residence of the phthisical patient in a cow-house: a project which, we believe, was first announced to the public by Madame de Genlis, in the "Tales of the Castle;" and which was afterward adopted, and subsequently rejected, by the practitioners of Vienna. Of a mode of treatment which so completely changes the habits of the patients, and which is in many respects so disgusting to their feelings, it would be presumptuous to speak decisively, without personal experience. We shall only remark, therefore, that the cases produced by Dr. Beddoes prove nothing more than an alleviation of consumptive symptoms, by confinement with cows. To some of the reports, however, we must object that, though very well related, they do not challenge complete reliance,

liance, because they contain only the evidence of the *patients themselves*. Every considerate professional man knows with how much qualification this species of evidence is to be received: in some cases it may be the best: but, in general, it is extremely fallacious, and very different from the account which an intelligent physician would give of the same series of events. How often, in effect, do we observe that the most distressing sensations are produced by diseases which are accompanied with little danger: and how frequently does the patient feel but trifling inconvenience, in states which are marked to the experienced practitioner as big with alarm! This method of detailing the patient's supposed feelings, intermingled with hopes and fears resting on no solid ground of knowlege, and the assumption of it as the basis of rational practice, appears so likely to mislead, that it cannot be too quickly and earnestly discouraged. We have seen the reputation of empirics gain a temporary ascendency on this plan, but we cannot deem it admissible in scientific works.—From this censure, however, we shall have occasion, under the next head of Dr. Beddoes's work, to except the case of a physician, related by himself.

We have now to attend to the second method of cure in consumptive cases, proposed by this active author; the use of *Digitalis purpurea*. Of this remedy, Dr. Beddoes expresses a highly favourable opinion; and though he had before retracted the too extensive panegyric on it, which his first observations on its use in consumption conveyed, he still speaks of it in terms which will appear abundantly strong to most practitioners. He tells us, (p. 118) that 'in general, where he had all possible evidence of the existence of tubercles, the exhibition of Digitalis has been perfectly successful. If he specify that it has succeeded in three such cases out of five, he believes he should much under-rate the proportion of favourable events.' We shall be glad to learn that this high degree of success continues to be supported by experience.

The case of Dr. Briggs, in this part of the work, exhibits the effects of *Digitalis* on the vascular system, in a striking manner. There does not, however, appear to be any decisive evidence of the existence of tubercles in this instance. We should consider it as a case of febrile hæmorrhage, precisely adapted to the action of *Digitalis;* and which, without the use of that medicine, might probably have terminated in phthisis.

Here we meet with some valuable observations on the auxiliary remedies which may be conjoined with *Digitalis*.

'When fox-glove is deficient in operation, I have found the conjunction of opium in large doses, of bitters and squills, powerful auxiliaries. I have often joined with it hyoscyamus and cicuta.

'Mr.

'Mr. Allen, whom I have already mentioned, having laboured for some time under cough, pain of the breast, expectoration, and hectic fever, took tincture of digitalis thrice a day, in doses, gradually increased, till he reached twenty-five drops thrice a day. It had no manner of effect on his pulse, and did not sensibly alleviate any one of his symptoms, the sediment only in the urine totally disappearing in three days, under its use.

'Mr. Allen then took, at my request, a tea-spoonful of the following tincture: tincture of columbo, three drachms: compound t. of cinnamon, two drachms; of opium, one drachm and a half; adding to each dose three drops of tincture of squills for one of digitalis, till he came to half the dose of digitalis formerly taken alone. In a week, the dose of tincture of digitalis being thirteen drops, and of squill thirty-nine drops, the pulse was reduced to 50.'

The conjunction of calomel with *Digitalis* has also been found useful in incipient consumptions. Respecting the mode of action of this remedy, Dr. Beddoes has not expressed himself very clearly, and we are uncertain whether we can venture to give a representation of it. From some passages, however, (pp. 197, 198, 199,) we should conclude that he supposes *Digitalis* to act as a stimulant on the vascular system, and as a tonic on the stomach: but we shall quote the passages, to prevent misapprehension:

'Digitalis, in carefully regulated doses, that is, so administered as not to induce sickness or languor, very regularly increases the momentum of the blood. In this view, therefore, it is the contrary to a *sedative*. Of the fact here stated, I think myself more certain for the following reason.

'It had long (as I have publicly stated) appeared to me practicable to acquire measures of irritability and sensibility, particularly of the former. I supposed that an instrument might be so constructed, as when applied to some artery, to shew the force of its stroke.

'Having mentioned this idea to Mr. Robert Weldon, that ingenious mechanic fell upon a simple contrivance, which seems capable of being rendered worthy of adoption by medical practitioners, and which, I believe, under a fair prospect of remuneration, he would improve and make public.

'Upon the scale of this instrument, I have seen the pulse of different healthy adults vary as widely as from six to sixteen degrees; and I am much mistaken if I have not felt an artery with a weaker stroke than that corresponding to six of these degrees, increased to above sixteen under the guarded administration of digitalis. The frequency, it is true, was always diminished; but still the dilatations of the artery, in a given time, would have communicated much more motion.

'Having observed how greatly the appetite of many phthisical patients increased under the use of simple digitalis, I have given it in several cases of dyspepsia, and with the best effect. The appetite having

having increased in these cases, and the symptoms of indigestion having disappeared, I conclude, without imputing to it superior qualities of this kind, that digitalis will increase the power of the stomach. The limitation of the dose is obviously a condition applicable to all substances in possession of the title *stomachic* or *tonic*.'

These ideas are certainly very different from those of other practitioners, who have employed the *Digitalis*; and as far as our own experience may be admitted as evidence, the conclusions are entirely contrary to fact, if we rightly understand them.—The following passages will still farther serve to ascertain this matter:

'In the production of languor, of excess of sensibility, head-ache, and bilious vomiting, digitalis seems greatly to resemble opium. I have known digitalis occasion an increase of the pulse from 76 to 120, with heat of the skin and head ache. In two instances I believed it to produce feverishness, with a peculiar mottled appearance of the whole skin. In one person a sort of intoxication so repeatedly followed a dose of fourteen drops of the tincture, taken twice a day for two or three days, that I could entertain no doubt as to the cause.

'If, therefore, I were to exhibit the materia medica upon a map, I should represent digitalis as not merely touching upon opium, but bordering upon it for some space. In another part it should be contiguous to the vegetable tonics, or bitters.'

Such a map would certainly require the correction of a medical D'Anville in future.

Some experiments on Frogs are related, to shew a similarity between the action of *Digitalis*, and that of opium, externally applied.

We have judged it necessary to express our decided opinion respecting the theory above proposed, because Dr. Beddoes has reprobated, in very strong terms, the exhibition of *Digitalis* in active inflammation of the internal parts:

'Whatever may be the justness of these ideas, I hope I have brought together facts enough to induce those to pause who may be tempted to argue from a decreased number of pulsations to a decrease of living action, and from this to the propriety of employing digitalis, in the height of inflammatory orgasm. In pleurisy, if any one should be mad or wicked enough to forego the so certain resource of the lancet in favour of the *sedative* virtue of digitalis alone, he would, I apprehend, increase the disease, if he confined himself to moderate doses. If, with digitalis, he employs copious bleeding, his practice will not admit of reasoning, as the benefit from the operation may mask the mischief from the medicine. Perhaps, from the peculiar susceptibility of the system, this mischief will be more, than may be apprehended from experience of states not inflammatory. It is possible that immense doses, by rendering the period of excitement evanescent,

evanescent, might produce the desired effect. On this principle, opium may be sovereign in pleurisy. But I know not who would feel himself justified in proceeding on such a principle. If any one bold enough can be found, it is fit that he should be clearly given to understand what he is risquing.'

The experience of several practitioners, we believe, stands in direct contradiction to these hypothetical fears and prohibitions. We have, indeed, heard of no persons, *mad or wicked enough* to forego the use of the lancet entirely for *Digitalis*: but we have seen and heard enough of its effect in moderating inflammation, after blood-letting had been ineffectually carried as far as was deemed prudent, to be assured that the observations in the passages quoted above are unfounded.

In treating of the cure of Scrophula, Dr. Beddoes informs us that he has experienced much advantage from the exhibition of the muriate of lime *:

'I have given it to near an hundred patients, in various conditions of life. The dose has been from ten drops for young children, to two drachms for others, three or four times a day. A drachm, diluted with water, (and this is the way I have often ordered it) I consider as a medium dose.

'There are very few of the common forms of scrophula in which I have not had successful experience of the muriate of lime. A few cases will exemplify its powers, and induce practitioners in medicine, when they want a more powerful remedy for scrophula, to have recourse to this.'—

'The prudent practitioner will increase the dose with caution, and dilute the medicine. Probably a drachm of the muriate should not be given in less than an ounce of water, or other vehicle.—'

'It is certainly not by purging that muriate of lime cures *tabes mesenterica*, or any other scrophulous affection. I have scarce ever been obliged to lessen the dose on this account, but often to give aperients under its use.'

The cases produced in support of this practice are curious and satisfactory.—The volume concludes with some cases and remarks on the power of *Digitalis* in consumptions, by Dr. Kinglake; which in general accord with those of Dr. Beddoes.

The contents of this work are sufficiently interesting to procure the attention of the faculty, though many will not coincide in all points of opinion; and our sincere respect for the author makes us feel great reluctance in ranking ourselves among this number.

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* The muriatic acid saturated with lime.

ART. VII. *An Essay on the Malignant Pestilential Fever, introduced into the West Indian Islands from Boullam, on the Coast of Guinea,* as it appeared in 1793, 1794, 1795, and 1796. Interspersed with Observations and Facts, tending to prove that the Epidemic existing at Philadelphia, New York, &c. was the same Fever introduced by Infection, imported from the West India Islands: and illustrated by Evidences founded on the State of those Islands, and the Information of the most eminent Practitioners residing on them. By C. Chisholm, M. D. and Inspector General of the Ordnance Medical Department in the West Indies. 2d Edition, much enlarged. 2 Vols. 8vo. 16s. Boards. Mawman. 1801.

THIS treatise has received so many important additions, in its present form, that we shall deviate from our usual rule of slightly noticing second editions, and bestow on it a rather circumstantial account.

The author still maintains the opinion which he had advanced in the first edition *, that the yellow fever was originally brought to the West Indies from Bulam, in the ship Hankey. As his prior report of the state of this vessel on its arrival at Grenada, and of the communication of the disease to persons who had gone on board from the island, was eagerly controverted in some American publications, Dr. C. has carefully collected farther evidence in support of his original statement; which, as far as we can judge, renders his opinion sufficiently probable. In cases of this nature, where motives of pride or interest induce some of the witnesses to disguise the truth, it is scarcely possible to attain certainty. The progress of the fever seems, however, to be accurately traced, from the first communication between the unfortunate crew of this vessel with the inhabitants on shore, to the diffusion of contagion by the intercourse of the inhabitants with each other: but, for the proofs of these facts, we must refer to the publication itself; since, though they form an interesting part of the history of the disease, they would occupy too much room in our pages.

To the full account which Dr. Chisholm had before given of the symptoms of this fever, he has now added all the information that can be obtained from other publications, in connection with the subject; so that his work really comprizes almost every circumstance known respecting the disease.—The appearances which distinguish this pestilential fever from the plague, and from the yellow remitting fever of the West Indies, are carefully marked.—On the subject of the Philadelphia fever, Dr. Rush's opinions concerning its origin are combated;

* See M. R. vol. xix. N. S. p. 62.

and Dr. C. asserts that it was imported into America by the diseased crew of the vessel which carried the damaged coffee. It is unpleasant to add that, to the *discordant* opinions of some of the medical practitioners attached to the army, the author attributes a great share of the mortality which thinned the ranks of our brave troops in the West Indies.

In treating of the cause of the pestilential fever, Dr. Chisholm has adopted the theory of Dr. Mitchell of New York, which he supposes to contain a complete elucidation of the doctrine of contagion. We think that this part of the work will be read with less satisfaction than the rest; because Dr. Mitchell's system has gained no footing in this country, where the attempts to form a chemical pathology have as yet been attended with little success. Indeed, Mr. Davy's experiments appear to entirely set aside Dr. Mitchell's hypothesis.

On the much-contested subject of the cure of this fever, the author expresses himself decisively an advocate for the free exhibition of mercury. He recommends the moderate use of evacuants, previously to the mercurial course: but he seems to doubt the propriety of the tremendous effusion of blood advised by Dr. Rush. Cold bathing is also mentioned by Dr. Chisholm as a valuable remedy in this fever; and he informs us that it has been successfully employed even while the patient's habit was completely charged with mercury. As this is a new and important fact, we shall lay it in a particular manner before our readers:

'The employment of cold bathing in the malignant pestilential fever, with the intention of giving strength and tone to the system, and facilitating the action on it, of the mercury exhibited, was originally suggested by the total unaptness of bark wine and other tonics to produce this effect, whilst the rapid advance of a gangrenous disposition gave little prospect of a happy termination without a salivation. Every one acquainted with the received doctrine of the "modus operandi" of mercury, and with the prejudices which have existed against the application of cold to the body, in any form, during the exhibition of that medicine, will doubtless acknowledge that no small share of fortitude, and disregard of popular opinions, distinguished the practitioner who first adopted the practice. Dr. Armstrong, of St. Kitt's, has, I believe, the merit of an innovation in medical practice, which must terrify timid practitioners; and which, being so completely opposite to all theoretical notions with respect to the combination of cold and mercurial action, must startle the boldest physicians of the old school. The manner in which the cold bath is employed with this intention, is as follows: the mercury is exhibited in the manner already described, till a ptyalism is excited. Should any doubt, however, arise of its producing this effect, recourse must be immediately had to the cold bath; which is to be administered repeatedly in the course of the day, by dashing

over

over the naked body of the patient a large pailful of cold water; and, wiping him dry afterwards, as quickly as possible, he is laid in bed, covered with a single sheet, and a glass of spiced wine given to him. Where this practice has been employed with judgment, assiduity, and attention, the effect of it in exciting mercurial action, has been wonderfully great; nor, under such circumstances, has it once failed.'

Dr. Chisholm seems inclined to believe that the beneficial effects of mercury depend on the quantity of oxygen which it imparts to the system.

In the second volume, the author discusses the means of preventing this epidemic; and many of his observations on the local circumstances of our West India Islands appear to deserve particular attention.—In the account of Demerary, we meet with the following curious note:

'I probably hazard the implication of credulity by the following note: In the year 1797, happening to be at Governor Van Battenburgh's plantation, in Berbice, the conversation turned on a singular animal which had been repeatedly seen in Berbice river, and some smaller rivers, such, particularly, as Mahayçony and Abary, on the same coast. So many circumstances, relative to this animal, were detailed by Mr. Van Battenburgh, as removed much of the disinclination to belief I felt. This animal is the famous Mermaid, hitherto considered as a mere creature of the imagination. It is called by the Indians méné, mamma, or mother of the waters. The description given of it by the Governor is as follows: The upper portion resembles the human figure, the head smaller in proportion, sometimes bare, but oftener covered with a copious quantity of black long hair. The shoulders are broad, and the breasts large and well formed. The lower portion resembles the tail portion of a fish, is of immense dimension, the tail forked, and not unlike that of the dolphin, as it is usually represented. The colour of the skin is either black or tawney. The animal is held in veneration and dread by the Indians, who imagine that the killing it would be attended with the most calamitous consequences. It is from this circumstance that none of these animals have been shot, and consequently not examined but at a distance. They have been generally observed in a sitting posture in the water, none of the lower extremity being discovered until they are disturbed; when, by plunging, the tail appears, and agitates the water to a considerable distance round. They have been always seen employed in smoothing their hair, or stroking their faces and breasts with their hands, or something resembling hands. In this posture, and thus employed, they have been frequently taken for Indian women bathing. Mr. Van Battenburgh's account was much corroborated by that of some gentlemen settled in Mahayçony and Abary. Captain Stedman, in his narrative of the Expedition against the Revolted Negroes of Surinam, from 1772 to 1777, (vol. ii. p. 176.) maintains, that the animal called a mermaid, is really and truly a viviparous fish, the female of which is

furnished with breasts; that the appearance of hair is a deception proceeding from a fin running down the back, of a curious construction; that the hands are fleshy fins, &c. But it is to be observed, that he drew his information from "old negroes and Indians," whose remarks, we may suppose, were not very accurate, especially as they were, whilst looking at the animal, under the influence of dread. The reader may compare this with *Lord Monboddo*'s curious relations, and believe as much as he chuses of it; as what I have said comes from very respectable authority, I thought it meriting attention.'

We cannot conclude our view of this work without observing, that much of the additional matter in the second volume might have been spared. Almost every thing essential, on the subject of the epidemic, had been said in the first volume; and many details are introduced in the succeeding part of the work, which are not immediately connected with the former. Of this nature, are the experiments with nitrous acid, and oxygenated muriate of pot-ash; which, though they strengthen the testimonies already given in favour of those remedies, have no other relation to the proper subject of Dr. Chisholm's book, than the frail and hazardous tenure of the chemical theory of diseases.

Fer.

ART. VIII. *An Essay on the Inspiration of the Holy Scriptures of the Old and New Testament.* By John Dick, A. M. Minister of the Gospel in Slateford. 12mo. pp. 291. 3 s. Boards Ogle, Edinburgh, and London. 1800.

BELIEVERS in Revealed Religion have differed much on the subject of Inspiration; and when we consider the difficulties which it presents on discussion, we cannot wonder at the various opinions which have been entertained concerning it. May it not be questioned whether it be necessary to attribute inspiration to every part of the Sacred Writings; and whether, without introducing some distinctions and discrimination, we shall not involve the subject in the most insuperable embarrassment? Can it be imagined that Paul stood in need of the supernatural influence of the Divine Spirit on his mind, in order to recollect the injury which he had received from Alexander the copper-smith, or to remind him of the cloak and parchments which he had left at Troas? Could those historical parts of the O. T., which are avowed compilations from public records and other writings, require a divine superintendance in their composition; or is it at all essential to the interests of revelation to support such a position? Must Christianity sink in value and in influence, if the inspiration of the Proverbs or of the Canticles be abandoned; or must the History of the

New Testament be a mere idle fiction, unless the Apocalypse be maintained to be divinely authentic? In our opinion, polemics are more fearful than they *need* to be, and less discriminating than they *ought* to be, when they enter on this inquiry. If they would qualify their assertions, and confine their demonstration within certain limits, infidels would not be disgusted, and the rational friends of Revelation would be better satisfied. Mr. Dick is one of those whose zeal has outstepped his discretion. He contends for the whole, under a mistaken notion that a denial of the *plenary* inspiration of scripture tends to unsettle the foundation of our faith.

By inspiration, the author tells us, he means 'such an influence of the Holy Ghost on the understandings, imaginations, memories, and other mental powers of the writers of the sacred books, as perfectly qualified them for communicating to the world the knowlege of the will of God.' This definition refers only to the communication of the will of God: but, it may be asked, are matters of ordinary history to be regarded as a part of the Divine revealed will; and is it necessary, or even expedient, that a preternatural influence should pervade the mind of an historian who writes the transactions of a prince, or the travels of an apostle? There are parts of Scripture, in which inspiration must be supposed: but are we justified in asserting that it pervades every part of the writings which composed the Sacred Volume?

Though we cannot acquiesce in Mr. Dick's wholesale hypothesis, yet we are ready to allow him the merit of ingenuity, and of having been actuated by the best of motives in the compilation of the essay before us. The peril of the present times, he remarks, loudly calls on us to examine with care the evidences of our religion; and to make ourselves acquainted with the arguments by which the inspiration of the Scriptures is demonstrated. To assist those who are willing to engage in an inquiry of this nature, the author has composed his essay; in which he prescribes for himself the following plan:

First, to give an account of the inspiration of the Scriptures; or to shew in what sense he believes them to be inspired.

Secondly, to point out those writings of which the inspiration is asserted by the Christian Church, and assign some reasons why we attribute a divine original to these alone.

Thirdly, to prove the inspiration of the Scriptures by a variety of arguments.

Lastly, to consider the principal objections of infidels against their inspiration.

This plan is sufficiently comprehensive to include every thing that may be advanced on the subject:—but where is the neces-

sity for instituting the inquiry, when it is expressly asserted that "all Scripture is given by inspiration of God?" (2 Tim. iii. 16.) To this question, Mr. Dick himself very ingeniously replies, 'that this assertion is not a sufficient reason, why we should believe the inspiration of the Scriptures. The same claim is advanced by books, which we certainly know to have been written by wicked and designing men. According to the principles of common sense, and impartial reasoning, the testimonies of the Scriptures in their own favour ought not to be admitted, any more than the testimony of any other writing concerning itself, till we see it supported by satisfactory evidence.' Though the author makes this fair concession, however, he does not bear it in his mind; and hence his reasoning is not always pure and convincing, any more than his assertions are uniformly correct. He says that 'all the miracles, which were wrought in confirmation of the Gospel, must be considered as having been wrought in confirmation of the books in which the Gospel is recorded.' This is not a necessary consequence. Miracles in attestation of a divine mission are altogether distinct from the Miracle of Inspiration.

Though the Old Testament precedes the New, both as to time and place, Mr. Dick thinks that his purpose will be more easily and effectually accomplished by inverting this order; he therefore begins with considering the Inspiration of the N. T., adducing both the external and internal evidence. Respecting the former, he observes that the inspiration of the N. T. may be inferred from the credit, which the testimony of the writers concerning Christ obtained in the course of their public ministry, and from the reception of the books of the N. T. by those to whom they were first presented; and the latter, or internal evidence, from the character of Christ therein delineated, the system of doctrine, and the prophecies which they contain.

After having brought forwards his proofs for the inspiration of the New Testament, the author proceeds to the consideration of that of the Old; when he remarks that, 'if the N. T. be once proved to be inspired, the inspiration of the O. T. must be admitted without farther proof, because its books are explicitly recognized in the former as divine:' but Mr. D. does not rest the matter on this single argument. He distinctly examines the Books of Moses, the historical books, and the prophetical.

To the examination of the Old and New Testaments, the author has subjoined what he terms 'Proofs of the Inspirations of the Scriptures in General:' these are their sublimity, their piety, their purity or holiness, their efficacy, their harmony, and their miraculous preservation.

In

In considering the Objections against the Inspiration of the Scriptures, the writer makes distinct replies to those arguments which are adduced from the sufficiency of the Light of Nature, from the partial communication of the Scriptures, from their divine authority being incapable of proof, from their supposed contradictions, from their containing doctrines mysterious and contrary to reason, from their relating things unworthy of God, and from their style not being so dignified, so elegant, and so conformable to rule, as we might expect to find it in divine writings.

Mr. Dick's mode of resisting the attacks of Infidelity may be collected from the following extract; which is part of the reply to the 6th class of Objections:

'It is asserted that the Scriptures cannot be inspired, because many things in them are unworthy of God. Of this nature are those descriptions which represent him as cloathed with the members and actuated by the passions of a man; certain precepts which seem to be immoral and inhuman, as the command to Abraham to offer up Isaac, to the Israelites to borrow from the Egyptians, and to the same people to destroy the nations of Canaan; many of the laws of Moses, and in particular, those which are usually termed ceremonial; and a variety of passages, which are said to be trifling, obscene, and cruel, and to imply an approbation of base and criminal actions.

'I might content myself with referring to the authors who have treated of this subject, for an answer to all these particulars, a full consideration of which would lead to a discussion far exceeding our limits. A few hints, however, may be given with a design to shew, in what manner these apparent difficulties may be removed.

'When human members, and human passions, are attributed to God, the description is evidently figurative, and is intended, through the medium of sensible ideas, with which we are familiarly acquainted, to assist us in conceiving his infinite perfections. If such descriptions be supposed to be liable to abuse; if they seem calculated to beget and cherish gross conceptions of the Deity, as a corporeal and imperfect being; it should be considered that the danger is obviated in other places of the Scriptures, where, dropping the language of metaphor, the inspired writers give the most sublime views of his infinite greatness and glory. It will be acknowledged by every person acquainted with the history of human opinions, that the Bible was the first book, which taught the pure spirituality of the essence, and communicated just ideas of the immensity and immutability of God.

'The command to Abraham to offer up his son, will not appear objectionable to any person who reflects, that the power of life and death belongs to the supreme Governor of the universe, who may delegate it for sufficient reasons to another, or employ another as his minister to exercise it. The design of the command was important,

namely, to try the faith of the patriarch, and to exhibit an example of cheerful, unreserved obedience to all succeeding generations.

'With regard to the command given to the Israelites to borrow from the Egyptians, I observe, that, according to the best critics, the word rendered *to borrow* may be translated simply *to ask*, and thus the difficulty vanishes. The sovereign Lord of all had transferred a right to the property of the Egyptians to the Israelites, whom the former had long defrauded and oppressed. That they might be put in actual possession of it, he directed them to make a simple demand from their neighbours, without subjoining any promise, or giving any expectation that it would be returned. If it should seem improbable that an unconditional request would be granted, especially as it was the request of slaves to their unfeeling and imperious lords, we have only to recollect, that the miracles wrought by Moses were beginning to procure respect to the Israelites, and that according to the sacred story, "God gave his people favour in the sight of the Egyptians."

'The command to the Israelites to destroy the seven nations of Canaan is explained nearly in the same manner as the command to offer Isaac in sacrifice. When a nation hath forfeited by its crimes a claim to life, he who might swallow up the guilty by an earthquake, or consume them by famine and pestilence, may commission another nation to be the instrument of his vengeance. If the command seem difficult, because the Israelites could not obey it without feeling personal enmity, or being animated by a cruel and vindictive spirit towards the devoted victims, it should be considered, that it was equally possible for them to act in this instance without improper motives, as for a magistrate, from a love of justice, and zeal for the public good, to order the execution of a criminal, whom he pities as a man. On the supposition that some of the Israelites were enflamed by private resentment, or a thirst for blood, the blame was entirely imputable to themselves. The divine command was not the cause of their malice and barbarity, but merely the occasion of their displaying the bad dispositions, which previously lurked in their breasts.'

The work concludes with a serious exhortation to the reader to be thankful for the Scriptures, to cherish faith in them, to read them with humility of mind and with reverence, to make himself well acquainted with them, and to constitute them the only rule of his faith and practice.

As this Essay contains the substance of a course of Sermons which the author delivered to his Congregation, he naturally accompanied the argument with some practical exhortations, and he has done right not to omit them in his publication.

Moo-y.

ART. IX. *Mineralogy of the Scottish Isles;* with Mineralogical Observations made in a Tour through different Parts of the Mainland of Scotland, and Dissertations upon Peat and Kelp. Illustrated with Maps and Plates. By Robert Jameson, F. R. and A. S. Edinburgh, of the Linnæan Society of London, &c. &c. 4to. 2 Vols. pp. 243 and 279. 1l. 11s. 6d. Boards. White.

IN our xxxth vol. *N. S.* p. 11, we had occasion to notice, with much approbation, a former work of this gentleman, in one vol. 8vo. intitled, "an Outline of the Mineralogy of the Shetland Islands, and of the Island of Arran," &c. &c. We then observed that the publication at that time before us was the first regular piece of Scottish Mineralogy which had appeared in print, and that it exhibited undoubted marks of active and successful research. The present volumes afford ample confirmation of our former opinion of Mr. Jameson's talents, and also furnish abundant new matter which raises his scientific merit still higher in our esteem. They contain the whole of the former publication, very much improved; together with the geological and mineralogical descriptions of most of the Western Islands, and other considerable additions, of which we shall now present a general view to our readers.

The Introduction gives an abstract of the Wernerian account of the different kinds of mountain-rocks, with geognostic notices of the Strata of the Scottish Isles, and such parts of the mainland as are mentioned in the work. The author here remarks that, according to the latest observations, all the strata of our globe may be arranged under the following classes: 1. Primary, (*Urgebürge,*) such as granite, gneiss, &c. &c.—2. Transition, or Transitionary rocks, (*übergangsgebürge,*) including Granwacken, Granwacken Slate, Mandelstone, and others.—3. Stratified, (*Flötzegebürge,*) consisting of Sandstone, Limestone, Argillite, Basalt, and Coal Strata.—4. Volcanic, such as Lava and Pumice.—5. Alluvial, (*Aufgeschwemmte,*) comprehending Gravel, Sand, Clay, &c. &c. &c. Having formed this division of the rocks, which is founded on the supposed relative antiquity of their formation, Mr. Jameson concludes this part with some geognostic observations on the rocks of the Scottish Isles.

After this introduction, the author proceeds to describe the rocks and strata which occur on the road from Edinburgh to Glasgow, and at the Craig of Ailsa. The Island of Arran is also depicted, as in his former work: but some additions have been made relative to its mineral productions.—From Arran we are conducted to the Islands of Bute, Isla, and Jura. Speaking of Isla, Mr. Jameson observes that, besides the veins of lead

lead-ore which have been worked with considerable advantage, copper, silver, and even quicksilver have been found there.

The 12th chapter contains an account of a voyage from Jura to the Slate Islands of Seil and Easdale, and thence to Oban and the Isle of Mull.

'The Slate or Ardesia of Easdale (says the author, p. 195.) was first quarried about 100 years ago; but was for a long time of little importance, as sandstone flag and tiles were generally used for roofing houses. As the use of slates became more prevalent, the quarries were enlarged; and the present managers having obtained a very favourable lease, these quarries have been wrought to so great an extent, that 5,000,000 slates are annually shipped from this Island.'

One of the greatest strata of coal, that has yet been discovered in the Western Islands, is found on the Hill called Beinan-ini, in the Island of Mull, but it has not been properly worked.—Mr. Jameson closes the first volume with an account of the method employed for discovering coal.

In the beginning of Volume II. we find an outline of the Mineralogy of I-columb-kill and Staffa. The Basaltes of the latter, with Fingal's Cave, are in course particularly noticed; and the author has availed himself of the description of this magnificent scene, which was communicated by Sir Joseph Banks to the late Mr. Pennant.—Mr. Jameson then gives an account of Coll and Tirie; the latter of which Islands affords some remarkable marbles, as well as a substance which appears to be a species of the Corundum Stone, or Adamantine Spar.—We next find a sketch of the Mineralogy of the Islands of Eigg, Rume, and Canna; in his account of the former of which, Mr. J. relates an affecting anecdote:

'The minister of this parish, who was so good as to accompany us to several parts of the island, led us, by a very rugged path, to a wild sequestered spot, where there is a cave, remarkable, in the annals of this isle, for the murder of the Macdonalds, inhabitants of Eigg, by the Macleods of Skye. As the story is truly characteristic of the state of society in those parts at that period, I think it will not be uninteresting to relate it shortly.

'A party of the Macleods having landed upon the small island of Eillan-Chastel, behaved so outrageously to the women who were there tending cattle, that their friends instantly pursued, and put several of them to death. This so enraged the clan of Macleod, that they determined to take revenge, by ravaging the isle, and putting to death the murderers of their brothers. The islanders, sensible of their weakness, prepared to shelter themselves, upon the first appearance of an enemy. Soon afterwards a number of boats were seen approaching the isle; when the trembling inhabitants retired, in despair, to this cave, their only refuge. The Macleods soon landed, and traversed the whole island; but, as they could discover no human being,

being, they concluded that the Macdonalds had made their escape to the mainland, or to some of the adjacent islands. Disappointed and enraged, they were about to leave Eigg, to return to Skye, when unfortunately one of the horde observed the mark of footsteps on the snow, and thus they were enabled to discover the cave where the wretched inhabitants had taken refuge. Shrieks of despair were interrupted for a little, by a proposal of the Macleods, that if the murderers were given up to punishment, the other lives should be spared. This was only a cruel aggravation of their sufferings, as the Macleods were the aggressors. Connected, as the Macdonalds were, by the dearest ties, they determined to perish together, rather than to give up one of their number. The Macleods, with the most savage barbarity, instantly kindled great fires at the mouth of the cave, which soon suffocated the whole of the miserable inhabitants.'

Near to the cave which has been mentioned, are two veins of black Pitchstone, accompanied by Hornstone in Basalt; and Mr. Jameson observes (p. 45.) that, although Pitchstone has been discovered in various parts of Europe, it has not before been described as belonging to the rocks of Trapp formation.

Chapter 21. gives an outline of the mineralogy of the island of Skye.—Here are some considerable caves; one of which, at Camesketel on the south side, is famed for having afforded shelter to Prince Charles, (as he was styled,) when he was endeavouring to effect his escape from Scotland after the battle of Culloden.—In addition to the mineralogy of Skye, we also find some notice taken of the productions of the Islands of Rasay, Rona, and Scalpa.

The observations on Peat, in the 24th chapter, need not now to be detailed, since they are exactly the same as those which were contained in the author's former publication:—neither does the journey from Bernera to the Frith of Forth require to be particularly noticed; excepting that in p. 165. Mr. Jameson controverts, with some apparent success, the opinion of the late ingenious Dr. Hutton relative to the origin of Granite, which the Dr. supposed to be posterior to some of the strata that cover it.

In order to render the present work more complete, Mr. Jameson has added an outline of the Mineralogy of the Orkney Islands, founded on observations made during a visit to them in 1799. These isles appear to consist principally of sandstone, and are far from affording any thing interesting to a Mineralogist.

Kelp being of great importance to the Orkney Islands, Mr. Jameson, in a subsequent chapter, introduces his former observations on this substance *. We shall transcribe his table

* See some farther account of Kelp, M. R. *N. S.* vol. xxxiv. p. 49.

of

of the proportions of Alkali contained in different kinds of Barilla and Kelp:

		In the 100lb.
'Barilla and	Alicant—good	23½.
	Teneriff—bad	8 lb. 7 oz. 120 gr.
Kelp from	Norway—indifferent	2 lb. 11 oz.
	Shetland—indifferent	2 lb. 6 oz.
	Lewis—indifferent	2 lb. 11 oz.
	Ibid—indifferent	2 lb. 6 oz.
	West Highlands—much damaged	1-3d of lb.
	Arran	3½ lb.
	Isla—good	4 lb.
	Mull—good	4½ lb.
	Morven—good	4½ lb.
	Island Skye—good	5 lb.
	Leith shores	4 lb.'

The work is terminated by an account of the author's journey from Huna, on the coast of Caithness, to the Frith of Forth.

Hatch,

Art. X. *Geological Essays.* By Richard Kirwan, Esq. F. R. SS. London & Edinburgh, M. R. I. A. &c. &c. 8vo. pp. 502. 8s. Boards. Elmsley.

The object of this celebrated chemist, in the present publication, is to collect the principal facts and opinions which relate to the structure of the globe, from the best writers: by which re-union of views, he thinks, the correctness of the Mosaical account of the *Creation* and *Deluge* may be established. He supposes the surface of the primeval globe to have been in a liquid state, and the earths and metals to have been held in solution by the chaotic fluid, from which they subsequently chrystallized; and he then proceeds to remark that

'It is a fact at present well established, that in the act of crystallization a very considerable degree of heat is generated. Judging by analogy, how great then must have been the heat produced by the crystallization of such immense quantities of stony masses as took place at this period? the immediate effect of which must have been an enormous and universal evaporation, sweeping over the surface of the heated fluid according to the inequality of its diffusion and of the causes that produced it in various tracts.

'The heat thus produced must have been still farther increased in consequence of an event which naturally resulted from the degree at first excited. For in consequence of the heat and evaporation, the quantity of the chaotic fluid (the universal menstruum) as also its specific gravity, were diminished, and thus the substances contained in it (of which it was not the most natural solvent) were still more disposed to precipitation, as usually happens in such cases; thus then the

the ferruginous particles naturally not soluble while in their metallic state in any fluid, and of which immense quantities existed, were rapidly and copiously precipitated; the aqueous particles intercepted between them must in that case have been decomposed, and an immense quantity of inflammable air set loose. The heat thus produced increasing with the masses operated upon, must have risen at last to incandescence; in that circumstance the oxygen absorbed must have been in great measure expelled, and in its nascent state meeting and uniting with the inflammable air must have burst into flame. The progress of such high degrees of heat must have disengaged all the oxygen contained in the contiguous chaotic fluid, which uniting partly with more metallic iron, partly with the sulphurated and partly with the carbonic and bituminous substances, must have occasioned a stupendous conflagration, the effects of which may well be supposed to have extended even to the solid basis on which the chaotic fluid reposed, and to have rent and split it to an unknown extent.

'That flame should thus burst from the bosom of the deep is not a forced supposition, but has frequently been verified in latter times. I shall only mention one instance which happened in the beginning of this century, when flames burst out of the sea near Tercera, and an island was elevated.'

The production of the gaseous fluids is explained from the heat thus diffused through the atmosphere. The successive elevation of the mountains, and formation of the plains, are deduced from the same principle: but through this part of the work we cannot pretend to follow the author's process minutely. He combats Buffon's theory of the origin of limestone, and shews that it must have existed before the creation of fish.

Mr. K.'s opinions on the formation of Secondary Mountains are thus delivered:

'To form as just an idea of the formation of secondary mountains as the nature of an object inscrutable to human eyes can allow us, we must observe, 1°, That the greater part of the particles of solid matter contained in the chaotic fluid being deposited before the creation of fish, the various materials that enter into the composition of secondary mountains must have been furnished either by the destruction of such of the primary as existed in the sea, but either from want of solidity or the smallness of their mass were too feeble to resist its impetuosity when animated by storms, and being by continued friction reduced to atoms, or rolled into tumblers, were either diffused through, or hurried along by the agitation of the waters, or were crumbled to pieces by earthquakes, and variously dispersed through the ocean, or these materials were ejected in immense heated masses, by submarine volcanoes, into the bosom of the waves, to be by them farther comminuted, disintegrated, or decomposed.

'The various solids thus diffused at different periods of time through the vast body of the ocean, must have been gradually precipitated and deposited on such solid masses as resisted the progressive

motion

motion impressed upon the precipitating masses by that tumultuous element; hence they applied to and rested on the low lateral surfaces of many of the most considerable primary mountains, or were accumulated on the scabrous but firmly rooted fragments of such of those mountains as were before destroyed, intombing the shell-fish that adhered to or rested upon these fragments, and arresting by their initial softness the various sunk woods and such other vegetable or animal substances as chanced to be mixed with these precipitating masses, or were subsequently borne upon them. Trees naturally assumed the situation that afforded least resistance to the currents that conveyed them, and hence the uniformity that has been observed very frequently in their position. These depositions, when during their descent they attained a certain degree of density, must have proved fatal to the various species of fish which were involved in them, and hence the origin of the more solid piscine remains at present found in them; the softer parts being destroyed by putrifaction, in this manner, but after long intervals of time, the succeeding strata appear to have been formed, but they did not attain their present solidity until after the retreat of the sea, and through the operation of causes which I shall presently mention.'

From these premises, Mr. Kirwan deduces explanations of the principal geological facts, for which we must refer to the work. He then undertakes to compare his theory with the Mosaic account; in which he displays, as usual, great ingenuity, but in which the different classes of philosophical readers can scarcely be expected to agree.

In the next Essay, the author treats of the *Deluge;* and after having examined the different hypotheses which have been formed on this subject, he adopts the Mosaic account of that wonderful event.

The third Essay treats of subsequent partial changes in the state of the Earth; and here the separation of Asia from America is attributed to excavations produced by volcanoes. On the effect of volcanic eruptions in general, however, Mr. Kirwan thinks that the speculations of some late philosophers are much exaggerated; and he particularly attacks those accounts of volcanic mountains, which have been supposed to carry the antiquity of the earth beyond the Mosaic date.

In the fourth Essay, on *Lapidification*, we meet with several interesting remarks which it would lead us beyond our limits to extract: but we shall quote the following curious instance of petrifaction:

'In some cases, the interior or more central parts of the organised substance first decay, while the exterior remains sound; in such cases the petrifying operation takes place only in the interior: this has often been observed in woods where the wood is of a species that strongly resists putrefaction, or the water in which it is lodged is but slightly impregnated with petrescent particles, the petrifaction very

slowly takes place; of this we have a memorable instance in one of the timbers that supports Trajan's bridge over the Danube, some miles below Belgrade. About the year 1760, the emperor of Germany being desirous to know the length of time necessary to complete a petrifaction, obtained leave from the sultan to take up and examine one of these timbers. It was found to have been converted into an agate, to the depth only of half an inch; the inner parts were slightly petrified, and the central still wood. Undoubtedly the timber employed was of the kind least subject to rot, and the Danube is not known to contain any notable quantity of siliceous particles; but the fact is important, as it proves to a demonstration, that siliceous particles are soluble in water, are taken up by wood, that petrifactions are carried on in appropriate circumstances in modern times, and the successive process of petrescence as above stated.'

Essay V. relates to the *Decomposition and Disintegration of Stony Substances.* The external causes of these processes are stated to be, water, oxygen, and fixed air: the internal saline substances, sulphur, slightly oxygenated calces of iron, or of manganese, lime, argil, bitumen, carbon, and mephitic air. The effects of these agents are particularly considered.—Mr. K. next treats of *Mountains;* and, after some general observations, he proceeds to analyse the *Primitive Mountains:*

'The materials of which they consist, (he says) or which they contain in different instances, are ganites and stones of the granitic classes, as granitines, granitells, granilites, sienite, grunstein, or gneiss, shistose mica, siliceous shistus, basanite, hornslate, shistose or horn prophyry, jasper, petrosilex, quartz, pitchstone, hornblende, hornblende slate, argillite, trap, wacken, mandelstein, porphyry, serpentine, pott stone, sand stone, breccias, pudding stone, rubble stone, granular limestone, fluors, gypsum, topaz rock; for sand stone and rubble stone may be primeval, being formed after the crystallization of the greater masses.

'Some of these are common both to primeval and secondary mountains, as trap, argillite, porphyry, sand stone, breccias; parasitic stones are omitted.'

The nature of these component parts is afterward examined, with a minuteness and an accuracy that preclude abridgement. The observations on *Trapps* are peculiarly interesting.—It is remarked that primeval mountains are not always simple in their structure, but that they are sometimes *polygenous*, or having their component parts superimposed on each other. Of this species of composition, different examples are given.

Secondary, or *Epizootic Mountains* now come under consideration; and of these Mr. Kirwan observes that

'The principal character by which *derivative* mountains are distinguished, consists in their exhibiting vegetable substances, or petrifactions, or at least their impressions, or land shells, as those of snails,

snails, or fluviatile shells, with either none, or scarce any marine remains, though some of diluvian origin may exhibit these also.

'Secondary mountains are either formed of one species of stone, or of strata of different species, one covering or alternating with the other; the former I call *unigenous*, the latter *polygenous*: these are commonly *stratified*, the former often not. In some, different species are jumbled together, these I call *faraginous*; they are by some called *tertiary*, as resulting from the ruins of other mountains, tumultuously and promiscuously heaped together. The substances that form secondary mountains are either calcareous, of which there are various species, or *argillaceous*, or *siliceous*, or arenilitic, or *ferruginous*, or *saliniferous*, or carboniferous; of both these last mentioned I shall treat apart. The strata of secondary mountains frequently correspond with each other both in number, species, and thickness, in different mountains, not very distant from each other, as in West Gothland, &c.

'Although no certain order prevails in the disposition of secondary strata, yet there are particular dispositions, which, according to Voight, 2 Berg. 1793, 211, are constantly excluded; thus coal is never found under primitive argillite, &c. but he certainly, in his other instances, only proves that primitive stones are not found over secondary. According to Dolomieu, no stratum of crystallized, or granularly foliated stone, is ever found in secondary mounts. 8 Sauss. 284. he must except gypsum.'

After a particular account of these substances, the author advances to the subject of *Volcanic Mountains*. In this chapter, Mr. K. offers his reasons for believing that volcanic mountains do not consist entirely of matter thrown up by the force of subterraneous fire: which considerations relate chiefly to the size of Vesuvius and Ætna, prior to their first recorded eruptions; to the calcareous nature of the country round Ætna; and to the calcareous matters which have been repeatedly discharged from its crater.

The sixth Essay treats of the *Internal Arrangement of Mountains*, in which the late ingenious Mr. Whitehurst's opinion of the great original regularity of the strata is disputed.

Essay VII. relates to *Coal Mines*, and the Soils on which they are found. Mr. Kirwan supposes the theory of the vegetable origin of coal; and, from a variety of considerations, he draws the following inferences:

'1st, That natural carbon was originally contained in many mountains of the granitic and porphyritic order; and also in siliceous shistus, and might, by disintegration and decomposition, be separated from the stony particles.

'2dly, That both petrol and carbon are often contained in *trap*, since hornblende very frequently enters into its composition.

'My opinion, therefore, is, that coal mines or strata of coal, as well as the mountains or hills in which they are found, owe their origin to the disintegration and decomposition of primeval mountains, either

either now totally destroyed, or whose height and bulk, in consequence of such disintegration, are now considerably lessened. And that these rocks anciently destroyed, contained, most probably, a far larger proportion of carbon and petrol, than those of the same denomination now contain, since their disintegration took place at so early a period.'

This supposition is pursued to a considerable extent, in explaining the different phænomena of the strata of coal.

The eighth Essay treats of *Common Salt*, and its Mines.—Here the author explains the cause of the saltness of sea water, by supposing that the muriatic acid and soda had existed in the chaotic fluid, and that the vitriolic acid was a subsequent product.

Metallic Mines are briefly considered in Essay IX.

Essay X., and last, consists of observations on the *Huttonian Theory of the Earth*: but, as it is entirely controversial, we shall not enter into its merits.

This volume will undoubtedly obtain general circulation among philosophical readers, on account of the known character of the author, and the interesting nature of its contents.

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Art. XI. *A Tour round North Wales*, performed during the Summer of 1798: containing not only the Description and local History of the Country, but also, a Sketch of the History of the Welsh Bards; an Essay on the Language; Observations on the Manners and Customs; and the Habitats of above 400 of the more rare Native Plants; intended as a Guide to future Tourists. By the Rev. W. Bingley, B.A. F.L.S. of St. Peter's College, Cambridge. Illustrated with Views in Aquatinta by Alken. 8vo. 2 Vols. 1l. 1s. Boards. Williams. 1800.

Whether the increase of Welsh Tours has been encouraged by their favourable reception with the public, or whether they are productions of more pleasant and easy labour than other literary works, we shall not venture to pronounce: but, whatever the cause may be, the fact certainly is that we have been furnished with a supply at least equal to the demand. The author of the present volumes informs the reader that 'he was induced, by the accounts he had at different times received of the stupendous and picturesque scenery of some of the counties of North Wales, to spend three months that he had to spare from his College avocations, in that romantic part of Great Britain.' His mode of travelling was chiefly on foot; which, when health and strength are not wanting, Mr. Bingley considers as the most useful and convenient to the tourist, especially if he be a naturalist. The general expences of travel-

ling in Wales, he remarks, are little less than on the roads in the central parts of England.

Mr. B. commences with an account of Chester, from which place he directed his route by Hawarden Castle, Flint, Holywell, St. Asaph, Conway, Bangor, Caernarvon, into Anglesea; and thence by Harlech, Mahynleth, Montgomery, &c. making first a complete circuit of N. Wales, and afterward proceeding to Bala, and thence to Shrewsbury. Of each of these places, the author has given a short description and history; the materials of which are not all supplied from his own observations, but are principally drawn from works with which the public have been long well acquainted. Extracts from these are introduced with more ceremony than propriety; and with little scruple respecting their length. Thus, of Snowden, the author writes; 'Mr. Pennant's description of this mountain is so extremely accurate and expressive, that instead of my own observations I will give that in his own words.'—Again; 'the following lines from the Gentleman's Magazine on this mountain are so energetic and full of beauty, that I could not resist the temptation of transcribing them in this place.'—'Of the story of Sabrina, Milton has given us so elegant and poetical a description, that I cannot resist the temptation of following Mr. Pennant's excellent example in transcribing it here.'—Other instances occur, of the author's *inability to resist this sort of temptation;* and at the end of the tour he has, 'at the desire of some of his Welsh friends,' added two letters written by the late Lord Lyttelton, giving an account of his journey into Wales, and published in his miscellaneous works.

This method of fabricating a book of travels, we think, scarcely deserves to be tolerated, though it may form altogether an entertaining work; and indeed we suspect that the unfavourable impression, which it made on us, prevented our receiving pleasure from such parts of Mr. Bingley's volumes as are properly his own. The style is, in general, plain and natural, for which the author has given himself credit.—He accuses Mr. Warner of having, among other errors, mistaken Bangor in Caernarvonshire for Bangor in Flintshire: but, in some of his criticisms, Mr. B. is not fortunate. On the following passage of Camden, concerning the river Clwyd, "though the valley at the mouth of the river *seems* lower than the sea, yet it is never overflown; but by a natural, though an invisible impediment, the water stands on the very brink of the shore, to our just admiration of the Divine Providence;" he remarks; 'if the marsh only *appears* lower than the sea, without being so, there certainly seems no wonder at all.'—The word *seems* is as much misapplied by this tourist as by Camden; for it must be

allowed

allowed that there *seemed* to be a cause for wonder, though it is probable that in reality none existed.

The account of Merionethshire supplies us with a description of a *Watering-Place* which is perhaps not much known to our readers. We therefore copy it, as a specimen of the work:

'Barmouth is placed in one of the most disagreeable situations that could possibly have been chosen for it, near the conflux of the river Maw, or Mawddach, whence it is called by the Welsh, Aber Maw, and from this Berthaw, or, corruptedly, Barmouth. Some of the houses are built amongst the sand at the bottom, and others at different heights, up the side of a huge rock, which entirely protects the town on the east. Their situations are so singular, that it is really curious for a stranger to wind up along the narrow paths amongst the houses, where, on one side, he may, if he please, enter the door of a dwelling, or on the other, look down the chimney of the neighbourhood in front. The lower part of the town is almost choaked up with sand, which fills every passage, and in wet weather, it is extremely dirty and unpleasant. The houses are the most irregular possible—in short, it appears to be such a place as nothing but the pleasures of society can render at all comfortable.

'It is frequented during the summer season by many genteel families from Wales, and the west of England, as a sea bathing place. Mr. Robert Vaughan of Hengwrt, in his Sketch of the History of Merionethshire, seems to ascribe its origin to persons frequenting the banks of the Mawddach, "by reason of the herb scurvy-grass which grows there in great abundance."

'The company must find it an uncomfortable place, for the inn (the Cors-y-gedol Arms) is at times almost buried in sand, and a person cannot walk many yards from the door without being up to the ankles in it. Added to this, a strong westerly wind blowing it against the windows and into all the rooms, must render it horridly unpleasant, and were it not for the civility of the hospitable Mrs. Lewis, the place would fail in one of its chief attractions.

'I was beyond measure surprized upon being introduced into the dining room, to find upwards of thirty persons, most of them of fortune and fashion, in so secluded a corner of the kingdom. I found too upon enquiry, that this was by no means all the company at that time in the town, for another large and good building, which Mrs. Lewis had in her own hands as a lodging house, was also quite full. To be again introduced, as it were, into the world, after my solitary rambles amongst the wilds of this country, made a most pleasing variety in my tour; and I enjoyed very much the cheerfulness and affability of every one present.

'The lodging houses in the town, are many of them dirty and miserable places. There are at Barmouth, three bathing machines, but these are entirely appropriated to the use of the ladies, the gentlemen bathing on the open coast. The amusements seem to consist in going out in parties on the water, or in lounging on the sands or beach. The latter is one of the most delightful walks I ever beheld. The wide river Mawddach winds amongst the mountains, forming

many and elegant promontories; these rise to great heights on each side, some clad with wood, and others exhibiting their naked rocks scantily covered with the purple heath. The summit of the lofty Cader Idris is seen to rise high above the other mountains in the back ground. Had the town been built here, scarcely half a mile from its present situation, instead of one of the most unpleasant, it might have been made one of the most agreeable retirements in the kingdom.

'Within the last three years, the number of visitors to this place has been much increased, which I can attribute to no other cause but the civility of the good hostess. She makes it her study to please every one, and she is so fortunate as seldom to fail.

'Barmouth is the port of Merionethshire; but Mr. Pennant says, it is not so much frequented as it ought to be, on account of the inhabitants (who do not attempt commerce on a large scale) vending their manufactures through the means of factors, who run away with many of the advantages which the natives might enjoy; yet this gentleman was informed, that a few years prior to the publication of his tour, forty thousand pounds-worth of flannels, and ten thousand pounds-worth of stockings, had been exported from hence in the course of a year. The number of ships at present belonging to this port, is about a hundred. The population of the place is estimated at sixteen hundred.' G.2.

In his observations on Bardism and Music, Mr. B. says, he 'cannot conclude this account more appropriately, than by inserting Mr. Jones's description of the music of his own country.' Fifteen tunes, as specimens of Welsh music, are then added; 'six of which are taken from Mr. Jones's excellent collection; the rest (says the author) I wrote from the harp. In the airs that I have selected, I have changed the keys of some of them, and altered their basses, that they might be the better adapted to the harpsichord.' What the basses were originally, this work affords us no means of judging: in their altered state, they cannot be highly commended.

The chapter on the Welsh tongue contends for its resemblance both to the Hebrew and to the Greek languages, and many striking instances of agreement are certainly pointed out. Some of the writer's remarks are worthy of attention, and perhaps of leading to farther research; especially his observations on the artificial structure of Welsh poetry. He seems fully sensible of the literary importance of the language of our forefathers: but, as an Englishman, his knowlege of it has not enabled him to treat the subject with great profundity. The claim preferred by him in behalf of the antient British, to the Saxon alphabetical characters, appears to us to be new; and it may afford a very fit bone of contention between Cambrian and Anglo-Saxon antiquaries. The researches, indeed, which such a contest would occasion, would probably be beneficial. Jo.

At the end of the tour, Mr. B. has given an Itinerary, and a catalogue of 'the more uncommon Welsh plants, with their places of growth.' These are useful parts of his book, and appear to be the produce of his own industry and observation. The plates, likewise, are engraved from his own designs, and have considerable merit.

Capt. B....y.

ART. XII. *A Tour through Part of North Wales, in the Year* 1798, *and at other Times*; principally undertaken with a View to Botanical Researches in that Alpine Country: interspersed wsth Observations on the Scenery, Agriculture, Manufactures, Customs, History, and Antiquities. By the Rev. J. Evans, B. A. late of Jesus College, Oxon. 8vo. pp. 416. 8s. Boards. White. 1800.

IN the preface to this volume, Mr. Evans informs his readers that the chief purpose of the journey here recorded was to collect materials for a *Flora Cambrica*, which it is his intention to publish at some future period. The design of the present work, however, is less to convey botanical details, than to describe other objects which attracted the author's attention. 'Every traveller (he remarks) sees, or fancies that he sees, something unobserved before, and that he is capable of communicating knowlege not imparted by others. The desire of relating what was pleasant to behold, or difficult to obtain, induces him to conclude that whatever was important to himself must be important to mankind.'

The account of this tour is given in the form of letters addressed to a friend. Mr. E.'s route is nearly the inverse of that of Mr. Bingley: (see the preceding article:) he commences from Shrewsbury; whence entering North Wales, he describes a track through Welsh Poole, Powis Castle, Llanvair, Montgomery, Bala, Llyn Tegid or Pimble Meer, Dolgellen, Barmouth *, Caernarvon, Bangor, Conway, Llanrwst, Corwen, and Chirk. It is a recommendation of the work, that the author does not, like some of our late tourists, labour to excite in himself admiration and enthusiasm: the satisfaction which he expresses appears genuine and spontaneous; and though he sometimes strays into flowery description, his reflections do not occupy an unreasonable portion of his book, nor are they oppressively sentimental. An extract or two will justify this praise, and gratify our readers.

In passing from Tan-y-Bwlch, over the wild mountains of Merioneth to the towering heights of Caernarvon, we meet with the following description of a storm in these Alpine regions:

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* Mr. Evans's account of this place is not materially different from that of Mr. Bingley, though rather more inviting:—see p. 387.

'However difficult we found the acclivities, the trouble of descending the Cwms, into the vales, was still more so. Both ourselves and beasts, sometimes up and sometimes down, were glad of every shelf in the rock as a place of halting. Hitherto we had borne up with tolerable temper, full of the idea, that *Pont aber glas Lyn*, would more than compensate for any temporary inconvenience; but we were now to encounter a scene that beggars all attempts at description, *an Alpine storm.*

'The morning was lowering, and as we gained the different ascents, the peak of Snowdon, Moel y Wyddfa, capt with clouds, became invisible. The darkness began to gather round, as we proceeded; and we perceived driving clouds passing rapidly beneath our feet, round some of the hills we had just ascended. The sheep were filing down the declivities for shelter, as though apprehensive of danger.

'From these appearances our guide prognosticated an approaching storm: we halted and deliberated what was best to be done: but being rather more than half way towards Bedd Kelert, deliberation only served to remind us of our unpleasant situation. To retread our steps would have been attended with equal inconvenience as proceeding. The country afforded no shelter; no vestige of a hut; nor was it to be expected in a country devoid of vegetation.

'The darkness momentarily increased, the misty clouds left their towering heights, and gaining strength by approximating towards the heavier ones beneath, soon became formidable from coalition. The winds became clamorous from the West and North; and, meeting with currents from the mountain vistas, soon blew an hurricane. All foreboded a dismal issue. The guide forgot his usual gaiety and loquacity, and began to shake and mutter a few inarticulate sounds. Despairing of making our escape, we relaxed in our exertions, and became less quick and firm in our steps: the very beasts shook their heads and snorted, as though sensible of the perilous situation.

'A general torpor at length seized the whole party; and visibly panic-struck we patiently waited the assailing elements; like mariners, who after every effort to save the vessel proves abortive, give up their toil in despair, and patiently look for the coming destruction.

'A general gloom, like that of a total eclipse, pervaded the whole atmosphere: the diversified mountain scenery we had before admired, had entirely vanished. Heaven and earth seemed blended together: the crumbling strata and shivering rock beneath our feet, afforded us the only vestiges of the latter; while in the former cloud dashed against cloud in angry conflict. To this war of elements, succeeded the fiercest torrents of rain that the imagination can conceive: to say it *poured*, would be to trifle with language: no words are adequate to a description of the storm. To those who have seen a water-spout at sea, the conception may be easy; but to those who have not, we can only say, that we appeared in the situation of persons placed under one of those mountain cataracts before described, with its waters rushing down upon our heads. To those who never have visited Alpine countries, no adequate description can be given; and to those who are familiar with them, this colouring will appear extremely faint.

'Impelled

'Impelled by imperious necessity to adopt every method for self-preservation, after being frequently beaten down, we had recourse to crossing arms and joining shoulders; closing like wrestlers for support. This, from the violence of the wind, at length failed; and had it not been from a circumstance, otherwise too trifling to mention, it is probable we should have been materially injured, had we escaped with life. A boy, about fifteen, had followed us several miles, to open the gates, in the walls that separate the different lordships, whom we had just before dismissed with a small gratuity. To our surprise he was not gone; but setting up a plaintive cry, he ran towards the south; and instinct induced us to follow. We were not able to keep pace with him, but found him safe lodged behind a vast rock, which raised its head above the other fragments. On a shelf of this, to the leeward, by an habit he had probably learnt of the sheep, he lay rolled up like a sleeping tortoise. Behind the covert of the same rock, we obtained shelter till the violence of the storm was past. In about an hour we were able to proceed through what, in England, would be called *heavy rain.*'

A pleasant anecdote is thus pleasantly introduced, in relating the incidents which occurred to the author at Corwen, a small town in Merionethshire:

'The only inn is the Owen Glyndwr, to which we were directed by a huge figure painted on a sign, having large eyes and a long beard, much like the Saracen's Head, meant as a likeness of the hero of the vale, who still lives in the remembrance and affections of the people of Corwen. The decent accommodations, and the pointed civility of the people, made this a comfortable retreat. Wishing for every kind of refreshment, after a long and toilsome day, I inquired for a *Tonsor;* after waiting till the supper was ready, and my patience nearly exhausted, I discovered that my meaning was not comprehended; the girl, supposing, from the time of the evening, and the custom of the place, that I must wish for the soothing sounds of music to lull me to repose, introduced a blind harper: I smiled as you may suppose; to have shewn any symptoms of disapprobation would have been calling my own taste in question, and an unfair requital of her well-meant intentions. I retained the village minstrel, and on further explaining my wants, was informed, there was no barber within many miles; that a woman shaved at Corwen, but she supposed my honour would not like to be shaved by a *woman!*— Smiling at the haughty ideas our sex were supposed to entertain of the fair, and the humble opinion she had of her own, I readily acquiesced. The girl, who understood me rather from my looks than my language, hastened her steps, and, in a few minutes, a tall stout damsel made her appearance, about twenty-five, of a fair and ruddy complexion; who, with the apparatus in her hand, and a smile upon her face, in broken English addressed herself to the company. In the one hand was a pewter jug containing hot water, in the other a case of razors and a shaving-box: wonder not at the latter, the accommodation of more polished countries; it was a present from a gentleman, whose beard she had taken off with so much dexterity and

ease, as to leave an impression of gratitude upon his mind, and he had, as a token of it, made this useful acknowledgment. She proceeded to the work. Entertained with the novelty of the thing, and the perfect good humour of the operator, expressed in smiles and the softest sounds of her language, my beard was removed before —I wished, shall I say? certainly before I expected. On inquiry, I learned that *Magdalene Hughes* was the daughter of a creditable person of the town, possessed, at his death, of a small property, which, while the family remained together, was sufficient to keep them, but that some were married and some dead, and she was left with an aged mother, and had taken up this odd, but profitable trade, as a means of procuring subsistence for both. I never had my beard more easily removed; but, independent of this, from the consideration of the latter circumstance, the man of sensibility will never pass Corwen without contributing a small gratuity to this dutiful daughter of affliction. I presented her with a small piece of silver on the occasion, and we soon learnt the happiness this unexpected event produced was not confined to herself. The generosity of this simple people appeared in this, as in many other instances, of too liberal a nature, to be confined within the narrow limits of self. The joy of the unadulterated Welsh character is the joy *of social participation*; the harper, who had been playing for us during the hour of supper, was now enlisted in the service of Magdalene; her young acquaintance in the town, and the servants of the house were invited to the feast; the mistress of the house, entering into the spirit of the occasion, contributed her mite also; the merry dance and chearing cwrw went round to an advanced hour, and we had the pleasure of witnessing a large portion of inoffensive mirth, produced by an inconsiderable gratuity.

'Early in the morning we were awaked before we wished by a number of voices singing; the cause of this unwelcome serenade, we found, was a congregation of Dissenters assembled in a chapel opposite the inn, before they went to their respective employments, to pray for the prosperity of their country, and supplicate the Divine Being for a speedy restoration of peace among the ambitious and contending powers of Europe. This matin service was performed for this patriotic purpose at the same hour once a week. There was something so truly philanthropic in this work of supererogation, as some might be inclined to term it, that, however we might differ in some points from this people, this called loudly for imitation, and we could not help furnishing our quota of approbation.'

G. 2.

Mr. Evans animadverts on some mistakes committed by late travellers; and he defends Gyraldus from the charge of being an unfaithful topographer:

'Entering the pleasing vale of Colwyn, (he says) we came to the source of the river Llyn y Cader. On our left was Llyn y Dywarchen, or the Lake of the Sod; celebrated by Gyraldus for its *Insula erratica*, or wandering island. He says, "it is set in motion by the winds towards the shore, and sometimes rejoins its native banks: that cattle have been surprized on it by a contrary gale, and carried a short voyage from the shore." Gyraldus has been considered as an

unfaithful

unfaithful topographer; and this, amidst a variety of others, has been one of the errors set in array against him. It is with pleasure I assert, that the fact corroborates the statement of his always lively, and often accurate pen. It is a piece of land, which consists of turf and peat, torn off by some convulsion, and kept compact by the thick entangling roots that abound in this species of soil. It is of an irregular shape, about 30 feet long.'

If this loose floating piece of land be the *Insula Erratica* of Gyraldus, it probably was considerably larger in his time. Mr. Evans's account is doubtless good evidence in favour of that writer.

In describing the scenes before him, the author delights to conduct his reader into times of old; and perhaps no country affords fairer or more frequent opportunities of indulging such a propensity. In this particular, indeed, his book is very entertaining; and Mr. Evans appears to be well studied in the history and antiquities of this part of our island. The accounts, which are interspersed in his tour, exhibit a natural and interesting picture of the manners of the Welsh, during the time of their struggles to maintain their independance against their encroaching and more powerful neighbours.

Mr. Evans remarks, in drawing the character of the present inhabitants of North Wales, that 'refinement has not yet deadened their natural feelings, nor produced that apathy of behaviour which prevails among a more polished people. The fondness they evince for their country, and tenacious adherence to their native language, are not more remarkable than their singular attachment for each other.'—He considers their knowlege and practice in husbandry as very indifferent: but their conduct towards each other, at the season of Harvest, is kind and generous:

'In consequence of the poverty of the soil and state of husbandry, the harvest is very late; and frequently, from the uncertain state of the weather, a difficulty occurs of procuring the scanty crops upon which their existence depends. It often happens, that the strength of hands is not adequate to the labour, and a poor farmer is in danger of being ruined. But there is a natural sympathy amongst the Welsh, that provides for this adverse circumstance. Sensible of the evil arising from a scanty crop badly housed, they form societies of assistance, called Cymmorthean Cynhauaf. As soon as one or two farmers have finished their own, or what portion is ready, they immediately repair, with their servants and horses, to assist their backward neighbour. This they do without any other fee or reward than their maintenance, and the consciousness that arises from the performance of an act of brotherly kindness. We have seen numbers engaged in this amiable occupation, and the pleasure they felt might be deduced from their clamorous exultation. If the sky lowers, and gathering clouds forbode a storm, likely to mar their friendly intentions, the noise increases, exertion, is redoubled, and they seem more anxious

to

to secure their neighbour's produce than their own. The desirable end accomplished, they return with shouting to the house, where, congratulating the farmer's good fortune, they express their mutual happiness in acts of cheering festivity.

'It was not till I had witnessed these scenes of philadelphic labours, that I fully understood the elegant allusion of the prophet, when speaking of the pleasures of the favoured people of GOD:—"*They joy before thee, according to the joy in harvest.*" Isai. ix. 3.'

Mr. Evans has subjoined very little more than the names of the botanical productions which he found in his peregrinations; reserving, we imagine, farther particulars for his proposed work. He remarks of the *Artemisia Absinthium*, which grows in abundance by the road side, that 'it is used by the country people instead of hops, and has the peculiar property of destroying acescency in beer grown hard for want of them.'

In the last letter, the author has given a short dissertation on Welsh poetry. His general opinions respecting this language are consonant with those of Mr. Bingley *, but he enters still more slightly into the subject. He is warm in the praise of Welsh; which, he says, (like Mr. B.) 'unites the expressive majesty of the Greek, with the harmonious softness of the Italian; and it is therefore particularly adapted for poetical expression.'—The frequent gutturals, the repetition of R, and the assemblage of broad sounding vowels and diphthongs, render it capable of displaying one of the chief beauties of poetry, viz. the sound corresponding with the sense; thus, on Thunder,

"Tân e dwr yn ymw riaw
Yw'r taranau dreîgiau draw."
'The roaring thunder, dreadful in its ire,
Is water warring with aërial fire.'

Yet, as a proof that it is capable of expressing a great degree of softness, we are recommended to take the following on the harp;

"Mae mil o leisian meluson
Mal mel o hŷd ym mola fhon."
'Within the concave of the womb is found,
The magic scale of soul-enchanting sound.'

The letter also contains some entertaining particulars respecting the Bards and Minstrels, and the peculiar manners and customs of the natives.

We conclude our account of this volume with adding, though perhaps unnecessarily, that we have received much pleasure from the perusal of it.

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* See the preceding article.

Capt. B....y ART.

ART. XIII. *Introduction to the New Testament.* By John David Michaelis, late Professor in the University of Göttingen, &c. Translated from the Fourth Edition of the German, and considerably augmented with Notes, and a Dissertation on the Origin and Composition of the Three first Gospels. By Herbert Marsh, B.D. F.R.S. Fellow of St. John's College, Cambridge. Vols. III. and IV. 8vo. 1l. 1s. Boards. Rivingtons. 1801.

FEW works, either in sacred or profane literature, occupy a larger space than those which have been written with the view of explaining or illustrating the sacred text; and few have less answered the purpose for which they were designed. At the time when Christianity made its appearance in Judea, it was a fashion among the Jews to allegorize every part of the Old Testament: in every precept they found a mystery, and in every fact they discovered a typical reference to the Messiah. This mode of explaining the sacred writings passed from the Synagogue to the Christian Church. It was first adopted by the Gnostics: but the most orthodox among the Fathers did not wholly reject it; and it was particularly prevalent in the Alexandrine school. Origen, in his earlier writings, carried it to an excess; in his latter works, he was more sparing of it: but he had more imitators of his earlier than of his latter style of composition. Chrysostom, in general, avoided allegory; his Homelies on St. Matthew, on St. John, and on the Acts of the Apostles, are excellent: but the first constitute his masterpiece. The severest critics praise the commentary of Theodoret of Cyr on the Epistles of St. Paul:—after him, the Greek Fathers, including John of Damascus, (with whom they close) do little more than copy Chrysostom. As an interpreter of holy writ, Jerom stands decidedly the first of the Latin Fathers: but his epistles are more valuable than his commentaries; and he is happier in his explanation of the Old, than in his illustration of the New Testament. Augustin's entire ignorance of the Hebrew, and his very slight knowlege of the Greek language, prevented him from rendering that service to the sacred text, which might otherwise have been expected from his great abilities:—but his merit should not be under-rated; his writings abound with pages of great good sense, subtlety, and eloquence. From his time to the revival of letters, the Latin Church produced a numerous list of commentators on the sacred writings; and though the works of few of them are now read, in their day they had their admirers, and several of them may even yet be consulted with advantage.

At the head of modern commentators, we must place Erasmus. In critical acumen, he has had very few equals; and, notwithstanding the great advances which, since his time, have been

been made in every branch of sacred literature, he is still read with delight and profit. His example was followed by a number of excellent writers: among whose productions, the notes of Vatable on the Old Testament, and those of Beza on the New, deserve particular praise. In explaining the literal meaning and peculiarities of the text, Grotius has not yet been surpassed.—Honorable mention might also be made, in this place, of the labors of many more modern authors; among whom several of our countrymen have displayed conspicuous merit: but the work now under our consideration seems to confine our attention to the biblical writers of Germany. Throughout the whole of the last century, that country abounded with men of eminence, in every branch of biblical learning. The *Commercium Epistolicum* of La Croze, a publication not sufficiently known in England, presents a pleasing picture of their ardour for study, of their wishes to disseminate knowlege, and of the candor and liberality of their sentiments. About the period at which that set of critics were moving from the stage of life, Michaelis was rapidly advancing into notice. He was born in 1717, and died in 1791; and the whole of his life was dedicated to literature. We have seen a list of more than 50 different works, which were the fruits of his study, and which gained for him the highest degree of celebrity: but those by which he is most known in this country are his *Notæ et Epimetra* to Dr. Lowth's celebrated *Prælectiones de sacrâ poesi Hebræorum*, and the subsequent publication, of which the third and fourth volumes are now before us *.

The first chapter of Vol. III. contains Observations on the Name and Number of the Canonical Gospels. The Professor observes that the word ευαγγελιον always signifies, in the New Testament, the joyful intelligence of the Advent of the Messiah; and, in opposition to those who have found mystical reasons for there being neither more nor fewer than four Gospels, he observes that, as far as human knowlege reaches, the circumstance of their amounting to that number can be ascribed to no other cause than mere accident.

Chapter II. treats of the harmony of the four Gospels, and is divided into eight sections. In the first, the author discusses the apparent contradictions of the Gospels; in the second, the objections made to the Evangelists, on their apparent contradictions with respect to the order of time; in the third, the rules to be observed in making a Harmony of the Gospels; in the fourth, the inferences to be deduced from the supposition

* For an account of the preceding volumes, see M. R. vols. xvii. and xviii. N. S.

that

that real contradictions actually exist in the four Gospels: in the fifth, he professes to shew the various degrees of importance which may be attached to the different kinds of those contradictions: the sixth contains an account of the principal Harmonies; in the seventh, he proposes his own system for the Harmony of the Gospels; and in the eighth he discusses, at large, the account given by St. Matthew, St. Mark, and St. Luke, of the events which took place on two 'very actively-employed' Sabbaths * in the life of Christ, which occasion the greatest difficulty in arranging the gospel history according to the order of time. None of these topics are exhausted by the author: but, on each of them, he makes a number of miscellaneous observations, which are always sensible and judicious, and are generally important. He admits 'that the accounts delivered by the several Evangelists do not at all times perfectly coincide:' but he contends that

'However dangerous these contradictions may appear to many friends of the Christian cause, and however forcibly they may have been applied by its enemies, the disadvantage, which arises from them, is by no means so great as is supposed, since they prove, what is of great importance, that the Evangelists did not write in concert. If the three first Evangelists had entered into a combination, with a view of imposing a fiction on the world, they would have avoided even the smallest appearance of disagreement; and, if the miraculous events, which they had recorded, had been empty fables, it is probable that St. John, who had read their Gospels, before he wrote his own, would have taken care not to admit the least deviation from the writings of his predecessors, in order that the fraud might have been less easily detected.'

In a farther part of this chapter, the Professor observes that

'If it could be shewn that real contradictions, that is such as are wholly incapable of a reconciliation, exist in the four Gospels, the only inference to be deduced is, that the writers were not infallible, or in other words not inspired by the Deity; but that we are by no means warranted to conclude, because the historians vary in their accounts, that the history itself is a forgery.'

In the truth of these remarks we entirely acquiesce. It *might* be advantageous to Christianity to have it proved that, in the largest sense of the word, the Evangelists *were* divinely inspired: but, should it be fully proved that they were *not* inspired, even in the most limited sense of the word, so that the works of the Evangelists would be intitled to no greater degree of credit than we allow to the histories of Xenophon, Livy, or Froissart, still there would be sufficient ground for our belief in the history of Christ.—We were much pleased with the good

* 'The day of the Sermon on the Mount,' and 'the day of the Sermon in parables.'

sense

sense and ingenuity of the following observation, on one of the subjects which have been found most perplexing by the writers of Harmonies:

'I would not have it understood, that the supposition of an event's having happened more than once, where different periods are assigned to it by different Evangelists, is in no case whatsoever admissible. But then it must not be an event of the most extraordinary kind, nor attended in every instance by the same minute circumstances. For instance, since various persons at various times may have offered themselves to be the disciples of Christ, induced either by the high expectations, which were formed of his character, or by the interested motive of receiving from him their daily support, to whom the answer 'Foxes have holes, and the birds of the air have nests, but the Son of Man has not where to lay his head' is well adapted, it is not improbable that this answer was given on more than one occasion. When St. Matthew therefore, ch. viii. 19, 20. relates this answer as given by Christ at the lake of Gennesaret, and St. Luke, ch. ix. 57, 58. as given during the journey through Samaria toward Jerusalem, we must conclude that the two Evangelists here relate two different things. This is however attended with the following difficulty, that both St. Matthew and St. Luke, immediately after the answer above quoted, agree likewise in another answer given by Christ to a young man, who was going to bury his father. This case is so extraordinary that I cannot suppose it to have happened twice; and I can account for the difficulty in no other manner, than by supposing that the two Evangelists introduced, on two different occasions, the conversation of Christ with this disciple, because each occasion suggested its introduction. They relate in what manner Christ rejected, or invited disciples, or put them to the test, though the instances, which they produce in the same place, happened at times distant from each other.'

In several parts of the chapter, Prof. Michaelis observes that real contradictions between the Evangelists prove nothing more than that they were not divinely inspired. We admit this position, in the sense which the author attaches to it: but we wish that he had given us an exact definition of what he understands by the word *inspiration*, because it is susceptible of a great variety of different meanings. If it imply that the Evangelists were inspired in each individual word written by them, the position of Michaelis is true, in its utmost extent:—but the inspiration of the Evangelists may be understood in a much more limited sense: it may be supposed that they were so far inspired as to relate, under the divine influence, whatever it was the will of Heaven that we should know through them, respecting the history and doctrine of Christ; and that thus far, but no farther, they were preserved by the particular favor of Providence from omission and error. This degree of inspiration may be deemed compatible with all the

contradictions in their writings, which have not yet been reconciled.

The Professor's account of the principal Harmonies appears to us imperfect. The Harmony, which he himself has proposed, is rather a table of contents of the histories of the Evangelists, with a general reference to the chronology of the events recorded by them, than an attempt to form a minute arrangement of the events in the order of time. To construct such an arrangement is, indeed, an arduous undertaking.—We agree with the annotator, in an observation made by him in one of the notes to this chapter, 'that the argument for St. Matthew's order, in general, rests unimpaired; and that hence we may infer, that those Harmonists who take St. Matthew for their guide, must meet with more success in their attempts to produce a chronological Harmony, than they who desert him.'

Those who wish to see the nature of a Gospel Harmony, and the difficulties attending it, cannot do better than study attentively the eighth section of the present chapter.—We copy a note by the translator, which gives at once a succinct and full view of the Harmonies of the Gospels;—a subject of great moment in Biblical literature:

'All the modern Harmonies of the four Gospels, of which we have above an hundred in various languages, may be divided into two classes: 1st, Harmonies, of which the authors have taken for granted, that all the facts recorded in all the four Gospels are arranged in chronological order, and 2dly Harmonies, of which the authors have admitted, that in one or more of the four Gospels chronological order has been more or less neglected. Osiander, or as he was called in German, Hosmann, is at the head of the first class, Chemnitz at the head of the second. The Harmonies of the former kind are very similar to each other, because though the authors of them had to interweave the facts recorded in one Gospel with the facts recorded in another, yet, as they invariably retained the order which was observed in each Gospel, and consequently repeated whatever facts occurred in different places in different Gospels, as often as those facts presented themselves to the Harmonists in their progress through the Gospels, there was less room for material deviations in their plan and method. But in the Harmonies of the latter kind we meet with considerable variations, because, though the authors of them are unanimous in their principle, they are at variance in the application of it; and, though they agree in making transpositions, by which they distinguish themselves from the Harmonists of the first class, yet they do not always make the *same* transpositions. Some, for instance, have supposed, as Chemnitz, archbishop Newcome, and other Harmonists of this class have done, that St. Matthew has mostly neglected chronological order, while others, as Bengel and Bertling, have supposed, that he has in general retained it. Hence, though they have all the same object in view, namely, to make a chronological Harmony, or to arrange

arrange the events, which are recorded in the Gospels, as nearly as possible according to the order of the time, in which the events happened, they have adopted different modes of producing this effect. For in some Harmonies the order of St. Matthew is inverted and made subservient to that of St. Mark, while in other Harmonies St. Mark's order is inverted, and made subservient to that of St. Matthew. Some Harmonists again suppose, that *all* the Evangelists have neglected chronological order, while others make an exception in favour of one, or more of them, though the question, which of the Evangelists should be excepted, likewise affords matter of debate. And even those Harmonists, who agree as to the Gospel, or Gospels, in which transpositions should be made, differ in respect to the particular parts, where these transpositions ought to take place. Amid this variety of opinion, and amid the manifold arguments, by which each Harmonist has ingeniously defended his own particular plan, it is really difficult to discover a fixed and solid principle, by which the events recorded by the Evangelists may be restored to chronological order. For this reason, Griesbach in the Preface to his Synopsis, p. 5. (ed. 2.) says, 'Ingenue profiteor, lectoresque admonitos esse cupio, Harmoniam. quam proprie dicunt in hocce libello neutiquam esse quærendam. Quamvis enim non ignorem, quantum laboris viri perdocti harmoniæ secundum regulas a se conditas in ordinem redigendæ impenderint, ego tamen exiguam utilitatem, imo nullam fere, quam non mea etiam Synopsis præstet, e minuta ista diligentia percipi posse arbitror: sed valde etiam dubito, an ex Evangelistarum libellis harmonica componi possit narratio, veritati quoad chronologicam pericoparum dispositionem satis consentanea, et firmis fundamentis superstructa.' The title of this work is, Synopsis Evangeliorum Matthæi, Marci, et Lucæ, una cum iis Joannis pericopis quæ historiam passionis et resurrectionis Jesu Christi complectuntur. Textum recensuit et selectam lectionis varietatem adjecit J. J. Griesbach, Editio secunda, emendatior et auctior. Halæ Saxonum, 1797, 8vo. The chief purport of this Synopsis, is not to give a chronological series of events, but to represent in parallel columns all those sections, which are common to the Gospels of St. Matthew, St. Mark, and St. Luke; St John's Gospel, with exception to the last part of it being omitted because the rest of it has so very little matter in common with the other three. And, to make as few transpositions as possible, St. Mark's order is generally retained, because it is the same with that of St. Luke, as far as relates to the facts which are common to all three. Those parts, which each Evangelist has peculiar to himself, are inserted in intermediate sections. The disposition of the whole work is very commodious, and I know of no Harmony, which affords so much assistance in the investigation of a subject, which has lately much engaged the attention of the German critics, and which will be particularly considered hereafter, namely, the origin of our three first Gospels, and the relation, which they bear each other.

'With respect to the question, whether there is a possibility of arranging in chronological order all the facts recorded in all the four Gospels, the greatest difficulty consists in the mode of arranging St. John's Gospel. For since, if we except the two last chapters, it has

has so very little matter in common with the other three, every Harmonist, who inserts the whole of it, must divide it into a great number of small portions, and insert them, one in one place, another in another, in intervals between the sections of St. Matthew, St. Mark, and St. Luke, according to the time, to which such Harmonist supposes, that each of those portions belongs. But many, if not most, of these insertions are so arbitrary, and so destitute of every criterion, by which we might pronounce with certainty, that such an event recorded by St. John immediately followed this event, and immediately preceded that event, recorded by St. Matthew, St. Mark, or St. Luke, that though some of them may have been inserted according to the time, in which they have happened, we cannot be sure that even the greatest part of them have received in any Harmony an exact chronological position. The safest method therefore is to confine all harmonic arrangements to the Gospels of St. Matthew, St. Mark, and St. Luke, and to consider St. John's Gospel, with exception to the two last chapters, as a work unconnected with the other three. The question of chronological order will then be reduced to a smaller compass; and since the facts, which are common to the Gospels of St. Matthew, St. Mark, and St. Luke, are arranged by St. Mark and St. Luke in general in the same order, we have only to choose between their order (namely in the facts which are common to all three) on the one hand, and that of St. Matthew on the other. For whoever supposes, that all three have neglected chronological order, and yet attempts to compose an Harmony, in which the facts shall be chronologically disposed, engages in an undertaking, in which it is impossible to meet with success; since on this supposition there exists no criterion, by which the real succession of the events may be determined. Now it has been already shewn in Note 2. to Sect. ii. of this chapter, that an historian, who knows in what order the events, which he records, followed each other, and yet designedly inverts that order in his narrative, must be conscious to himself, that his plan is such, as will expose his readers to the danger of mistaking the succession of those events. On the other hand, if an historian, though accurately informed in respect to the events themselves, does not always know, in what order they followed each other, he cannot be charged with neglect, though his arrangement be not chronological, since the order of real succession, which may be justly expected from an historian, who knows it, cannot be expected from an historian, to whom it is not always known. Consequently, as St. Matthew was in general eye-witness to the facts, which he has recorded in common with St. Mark and St. Luke, but St. Mark and St. Luke were not, it is surely more reasonable to expect chronological order in the former than in the latter. It is true, that wherever St. Matthew differs in his arrangement from St. Mark or St. Luke, these two Evangelists agree in their arrangement with each other. But this agreement affords no proof that they have written in chronological order: for, though nothing but an adherence to the real succession of events could produce an uniformity of arrangement in the works of two historians, who had no connexion, either mediate or immediate with each other, yet if either the one copied from the other, or both of

them drew from a common source, their arrangement might be the same, and yet not chronological. Now that one of these two suppositions must be adopted in respect to St. Mark and St. Luke, the late critical investigations on this subject, which will be considered hereafter, have placed beyond a doubt. The conclusion, therefore, that St. Matthew's order is in general chronological rests unimpaired: and hence we may infer, that those Harmonists who take St. Matthew for their guide, must meet with more success in their attempts to produce a chronological Harmony, than they who desert him.'

In chapter III. the author summarily inquires how it happened that St. Matthew and St. Mark, and also St. Mark and St. Luke, have in several instances a remarkable verbal harmony, though the one did not copy from the writings of the other. This is a point of great curiosity and importance in the literature of the sacred text: but, as Mr. Marsh, in his note to this section, refers to his 'Dissertation on the origin of the three first Gospels,' (subjoined to these volumes,) and as we propose to review that dissertation at some length, in a future article, we shall not enter on the discussion of it at present.—With this chapter, the author concludes his observations on the Gospels in general.

Chapter IV. contains an account of St. Matthew, and of the time at which he composed his Gospel. The Professor supposes that St. Matthew and Levi were different persons, and he inclines to think that the Gospel was written about the year 41. He discusses, much at length, and with great ability, the celebrated question of the original language of this composition; and he proves that it was the Hebrew, or more properly the Syro Chaldee dialect spoken at Jerusalem, in the time of the Apostles.—In the 9th section, he treats of the Hebrew Gospel used by the Nazarenes and Ebionites. This chapter abounds with curious learning; and the translator follows the author step by step, in his annotations. The Professor sums up the history of the Nazarene Gospel in the following words:

'The history of the Nazarene Gospel may be briefly summed up under the following heads:

'1. Very few ecclesiastical writers have taken notice of this Gospel: at which we have no reason to be surprised as few of them understood Hebrew, and no translation of it had been made before that of Jerom. Besides, the copies of it were very scarce even in Palestine, for Jerom mentions it as an unusual book, which he found in the library of Cæsarea.

'2. However, its name and character were not unknown; though it is difficult to determine, what the majority of Christians in the three first centuries thought of it, because Eusebius has expressed himself in ambiguous terms. In the fifth century most persons believed

lieved it to be the original of St. Matthew's Gospel: but whether they knew that it was interpolated, and distinguished the genuine text from its additions, we are not informed.

'3. Ignatius does not mention the name of this Gospel: he has a passage indeed, which existed in this Gospel, but that passage, as I have already shewn, was inserted in the Nazarene Gospel from the Epistle of Ignatius, and not quoted by Ignatius from this Gospel.

'4. It is quoted more than once by Origen, as ancient though not as scripture authority; for he considered it, probably on account of its interpolations, as a mere human composition, but he is far from speaking of it in terms of disrespect. What he thought of its genuine text, when separated from the interpolations, he has no where mentioned.

'5. Eusebius refers it to the αντιλεγομενα, and places it in the same rank with the Epistle of St. James, the second Epistle of St. Peter, the second and third of St. John, the Epistle of St. Jude, and the Apocalypse.

'6. Epiphanius describes the Nazarene Gospel, as St. Matthew's original: but he does not appear to have seen it himself, and therefore he probably followed the common opinion.

'7. Jerom was well acquainted with it, and describes it as St. Matthew's original.'

In one of the notes to this section, the translator thus expresses himself respecting the authority of the first and second chapters of the Gospel of St. Matthew:

'The evidence of the Greek manuscripts therefore is decidedly in favour of the authenticity of the two first chapters of St. Matthew's Gospel. Equally decisive is the testimony of the ancient versions; for these chapters are contained in all of them. That in some few Latin manuscripts the genealogy is separated from the remaining part of the first chapter, and that St. Matthew's Gospel is made to begin with ch. i. 18. is a circumstance, which is not only much too trivial to be opposed to the weight of evidence on the other side, but at the furthest can affect only the genealogy, and not the *whole* of the two first chapters. In fact, such writers of Latin manuscripts, as wrote the genealogy apart from the rest of the Gospel, were actuated not by critical, but theological motives. They found difficulty in reconciling the genealogy in Matth. i. with that of Luke iii. and therefore wished to get rid of it. Consequently it is highly uncritical to take *their* manuscripts even into consideration. With respect to the quotations of ancient writers, which form the third kind of evidence, it is sufficient to observe, that both Clement of Alexandria, and Origen have quoted from the two chapters in question, without signifying any suspicion of their want of authenticity. And what is still more, even Celsus, the great enemy of the Christian religion in the second century, has quoted from them. See Griesbach's Symbolæ criticæ, Tom. II. p. 241. We must set therefore all the laws of criticism at defiance, if we assert that the *Greek* Gospel of St. Matthew, to which alone the preceding arguments relate, began with ch. iii. εν δε ταις ημεραις εκειναις. That the Greek Gospel ever

began in this manner is in itself likewise incredible, since no writer, unless something had preceded, would say 'in *those* days.'

'On the other hand, however evident it may be, that the Greek Gospel of St. Matthew, from its very first existence, contained the two first chapters, yet, as this Gospel is a translation from the Hebrew (that is, Chaldee) of St. Matthew, it is still possible, that they were not contained in the original, that the original began, as Epiphanius says the Gospel used by the Ebionites began, with the words, 'it happened in the days of Herod the king, &c.' that the Greek translator prefixed a translation of some other Chaldee document containing an account of Christ's birth, and that, in order to connect it with the commencement of his original, he altered 'the days of Herod' to 'those days.' All this is possible: but it would be a very difficult matter to render it probable. It appears indeed from the Dissertation on the origin of our three first Gospels, ch. xv. that before any of our canonical Gospels was composed, there existed an Hebrew (that is, Chaldee) narrative of Christ's transactions, which contained only so much matter, as is common to the three first Evangelists, and therefore did not contain what is related in Matth. i. ii. But then it is further shewn in the same chapter, that this document formed only the basis of St. Matthew's Gospel, and that the Evangelist himself made very considerable additions and improvements. There is no improbability therefore in the supposition, that the two first chapters were added by the Evangelist himself, especially since the Hebrew Gospel used by the Nazarenes really contained them, as appears from Notes 10. 11.: and there is great reason to believe that the Hebrew Gospel used by the Nazarenes approached much nearer to St. Matthew's genuine original, than that which was used by the Ebionites, since the Nazarenes were descendants of the first converts to Christianity, the Christians of Judæa being called Ναζωραιοι, Acts xxiv. 5. while the Greek Christians were called Χριστιανοι, Acts xi. 26. Absolute certainty on this subject is indeed not to be obtained for want of sufficient data: but the same want of data makes it impossible to prove that St. Matthew was *not* the author of the chapters in question.—Among the various writers on this subject, no one has displayed more critical judgement than Professor Rau of Erlangen, in a short Latin dissertation published at Erlangen in 1793, entitled Symbolæ ad quæstionem de authentia i. et ii. cap. Evangelii Matthæi discutiendam.'

The whole of the 5th chapter is employed on St. Mark's Gospel; which Professor Michaelis seems to think was written in Rome, with the assistance and under the direction of St. Peter. Here we find the curious passage which follows:

'That St. Mark wrote his Gospel in Rome, and for the use of the Romans, is likewise the reason why he has omitted many particulars in the life of Christ, which are related by St. Matthew and St. Luke. The genealogy, for instance, though interesting to the Jews, was not so to the Romans: and the same may be said of Christ's nativity at Bethlehem, a name well known to the Jews, but probably unknown to the Romans. His total omission of Christ's admirable

admirable sermon on the mount, which St. Matthew has given at full length, and St. Luke in short extracts, appears at first sight, to be rather extraordinary. But we must recollect that this sermon was in fact polemical, and immediately directed against the false morality of the Pharisees. To understand this sermon therefore, it is absolutely necessary to have a previous knowledge of the Pharisaic doctrines: but these doctrines were unknown to the Romans. The unlearned are not only incapable of comprehending this discourse, but are in danger without the assistance of a learned interpreter, of totally perverting its meaning. It is a known fact, that very erroneous moral doctrines have been deduced from it, and that these doctrines have been applied as objections to the Christian religion. It has been asserted, that Christ totally prohibited the administration of an oath, the repulse of violence, an appeal to a magistrate, or self-defence. For these reasons, St. Peter himself would hardly have delivered this discourse to the Romans: and for these reasons, St. Mark passed it over in silence. The same motive induced him to give in only a few words, ch. xii. 38—40. another discourse which Christ directed to the Pharisees, and which St. Matthew has delivered at full length.'

Michaelis supposes that St. Mark availed himself of several written documents in the composition of his Gospel, but that he made no use either of St. Mathew or St. Luke. That he wrote *before* and that his gospel was used *by* St. Luke, the author positively denies. The chapter is concluded by the following sentence:

'No writer of the New Testament has neglected elegance of expression, and purity of language, more than St. Mark. The word ευθεως occurs incessantly, and he abounds likewise with numerous and harsh Hebraisms. Yet his Gospel is very valuable, because it contains several important though short additions to the accounts given by St. Matthew. For instance, the answer of Christ, which St. Matthew has recorded, ch. xii. 48—50. would be thought very extraordinary, unless we knew what St. Mark has related, ch. iii. 21.: but from this passage we clearly perceive the reason of Christ's answer. Sometimes he has additions, which more clearly ascertain the time, in which the events happened, as in ch. iv. 35. vi. 1, 2. It is therefore unjust to suppose that St. Mark neglected the order of time more than the other Evangelists, and still more so, to reject his arrangement for that of St. Matthew or St. Luke, in places where the time is positively determined by St. Mark.'

Here we must suspend our analysis of these volumes, for the present. In our next Number, we propose to resume the consideration of them.

[*To be continued.*]

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ART. XIV. *Elements of Chemistry;* comprehending all the most important Facts and Principles in the Works of Fourcroy and Chaptal: with the Addition of the more recent Chemical Discoveries which have been made known in Britain and on the Continent; and with a Variety of Facts and Views *which have never before been communicated to the World.* Intended for the Use, not only of those who study Chemistry, with those professional Purposes to which this Study is commonly referred, but also, for Farmers, Manufacturers, Dyers, and the other Artizans of the Chemical Arts in general, &c. By Robert Heron. 8vo. pp. 628. 12s. Boards. Longman and Rees. 1800.

FROM the preface to this volume, it appears that the author is much dissatisfied with the various elementary works that have hitherto been published, even by the most eminent chemists. He observes that 'in all *former* systems of chemistry,—except only that admirable treatise *the Philosophy of Chemistry* by Fourcroy,—there prevails *an unscientific confusion of arrangement*, exhibiting the different chemical substances, not so much in the order of system, as if they were taken up, one after another, out of a heap carelessly thrown on the floor of the Laboratory, or from the shelves in an Apothecary's shop.'—The Preface is replete with many similar censures on the writings of modern chemists; and even the chemical Lecturers do not escape the lash of Mr. Heron, who says (p. 10.) 'that the exhibitions at chemical Lectures are much like the slight of hand tricks of jugglers.'

An attack is also made on the authors of the different systems of chemistry, on account of neglect of style; and here, as well as after every other article of censure on others, this writer, with singular modesty, points out the superior merits of his own book and of himself. He remarks (p. 30.) 'that there exists not at present in English any work upon chemistry, in which the Student may find so much information within so little reading, and at so small an expence. This argument comes so directly home to mens' pockets and hearts, that to enlarge upon it, were needless.' He then concludes his Preface in the following manner: 'inaccuracies in language, errors in facts, vanities of theory, deficiencies and redundancies, sometimes disorder—and sometimes pedantry—of arrangement, will no doubt be easily discovered in the course of this work. Yet if its judges were to be only the *candid and judicious*; perhaps, the author would have little reason to dread extreme severity in the sentence.'

We are very sorry that we cannot agree with this writer in the good opinion which he so evidently entertains of his own performance. When a work is introduced to the world with

a title

a title and preface full of so much pretension as those now before us, the public have a most indisputable right to expect something above *mediocrity* at least; and an author who *thus* comes forwards must also expect to be weighed in the same balance, which he has employed with so little diffidence and lenity in judging the merits of others. We shall not, however, scrutinize this work with extreme minuteness and severity, but shall make only a few remarks.—The book undoubtedly contains a great portion of matter, but it is brought together in a more negligent manner of compilation than we have seen in any of the works to which Mr. Heron so liberally ascribes this defect; and while he condemns the style of other chemical writers, his own appears peculiarly turgid, affected, and confused.—We perceive that great liberties have been taken with nomenclature. *Light* (for example) is pedantically called *Lumen: Ceylonica* is employed for *Zirconia*; and we also find the terms *Phosphor*, *Muria*, *Borate*, *Fluore*, *Silice*, and *Strontiana*. Without entering into any discussion to shew the impropriety and little necessity of these alterations, we must observe that, although great and eminent chemists (such as Scheele, Bergman, Klaproth, and Kirwan,) may be allowed to alter and fabricate names, even sometimes more than cool sense and sound judgment can deem requisite, yet the same latitude never can nor will be granted to every compiler of what are called systems of chemisty.

In p. 105. *Pyrites* are defined as compound *Stony* bodies.—The *Arrow headed Selenites* (p. 184.) are mentioned as peculiar crystals, consisting of two sextine triangles joined together; yet every Mineralogist knows that these are only fragments of lenticular crystals, which have adhered to each other.—In pages 242 and 245, *Adamantina* and *Sydneia* are described as primitive *Earths*, although both have long been rejected as such. (Vide Klaproth's Beiträge 1795, p. 67. Phil. Trans. 1798, p. 110; and Babington's System of Mineralogy, pp. 113 and 115.) This error is the more remarkable, because Dr. Babington's book is quoted in p. 6 of the Preface.—In p. 263, the properties of *Tungstate of Lime* and *Wolfram* are strangely confounded under the name of the former; although, in the very same page, mention is made of the well-known experiments of Messrs. D'Elhuyar;—and in p. 508, the *gaseous Oxide of Azote*, or Nitrous Oxide, is confounded with *Nitrous Gas*.

We shall not follow the author through certain flights of fancy, such as that which induces him to believe that *Lime* is *concrete Oxygen*, &c. &c.—the preceding remarks must sufficiently prove that this work is of a very flimsy texture. The quotation, *Risum teneatis Amici?* which the author has so

flippantly applied to Count Rumford, might justly be retorted, did not the same great poet furnish some lines still more aplicable;

" *Quid dignum tanto feret hic promissor hiatu?*
Parturient Montes, nascetur ridiculus Mus."

Hatch.

ART. XV. *Elementary Treatises on the Fundamental Principles of Practical Mathematics.* For the Use of Students. By Samuel Lord Bishop of Rochester. 8vo. pp. 400. 8s. 6d. Boards. Printed at Oxford, at the Clarendon Press. London, Elmsley. 1801.

THE learned author of these elementary treatises is already well known to the mathematical world, and principally by his complete edition of the works of the great Newton.—The plan of the present publication will be understood from the words of the preface:

'We begin so low as with the principles of *Fractional Arithmetic*, Vulgar and Decimal, the business of Fractions being usually of the greatest embarrassment to a learner in the beginning of his Mathematical studies, not fron the difficulty of the operations, but by reason of the obscurity in which the writers upon this subject leave the principles involved, upon which the rules of operation depend. Our method is, in the treatise which is placed first, to deduce these principles from the general properties of numbers delivered by Euclid in the seventh and two following books of the Elements; and the treatise ends with the doctrine of Circulating Decimals, and the extraction of the Square Root of Fractions and Mixed Numbers. This introduces the learner to the doctrine of Infinite Approximations, and even brings him acquainted with Converging Series, in the instance of one of the simplest form. And as the examples of the extraction of the square root are given in calculations of the sides of Polygons inscribed in circles, the foundation is laid, in the end of this treatise upon Fractional Arithmetic, of the Construction of the Trigonometrical Canon.

'From the Arithmetic of Fractions we proceed to *Trigonometry*, Plane and Spherical; the Elements of which we deliver in three books; those of Plane Trigonometry in the first; those of Spherical in the second and the third—the second, containing the general properties of Spherical Triangles; the third, the Trigonometry of the Sphere, that is, the resolutions of the several cases, as they are called, by the Trigonometrical Canon.'—

'From Trigonometry we proceed to the *Projection of the Sphere*, a subject, that has never yet been handled with the accuracy it deserves, both for its curiosity and its use. Considered in its utmost extent, it would be a branch of Linear Perspective. But we confine ourselves to the three principal Projections, the Orthographic, the Stereographic, and the Gnomonic, which we treat in four Books; the first, containing the principal properties of Cylindric Sections, which are the

the basis of the Orthographic Projection; the second, the Orthographic Projection; the third, the Stereographic; the fourth, the Gnomonic, with an Appendix, shewing the application of the Gnomonic Projection to the construction of Sun-Dials. We conceive, at the same time, that we have treated this subject of Projection in a manner that goes to the bottom of it, brings many curious properties to light, not observed by former writers, and clears up many difficulties.'

Although first published, this work is the last in order of three volumes of elementary Geometry, which the Bishop will send forth from the Clarendon press. Vol. I. is destined to contain the first twelve books of Euclid, in Latin, with the author's corrections:—the second will consist of Euclid's data; a book on the properties of the sphere, comprehending the substance of the whole of the first book of Theodosius, with as much of the 2d & 3d as may be necessary for the demonstrations in Spherical Trigonometry and the projections, and for understanding the phænomena of the celestial sphere; with Archimedes on the dimension of the circle; and Dr. Keil's elegant treatise on the nature and use of logarithms. The Right Rev. author informs us that, although frequent reference is made to the unpublished volumes, he had good reason for not delaying the appearance of the present treatises: but what is next offered as an apology for this volume appearing in English, while the remaining are composed in Latin, we cannot admit as such: since it would not have needed an immense sacrifice of time, to have removed the blemish which the entire work must now possess. We are happy, however, in finding the learned Bishop strengthening by his authority the reasonable opinion of D'Alembert, that books of science ought to be composed in Latin. The Latin language would fulfill, with respect to communication, all the purposes of a conventional tongue.

The plan of study, which the preface then proceeds to recommend, does not meet our entire approbation. If the student wishes to be an erudite mathematician, and to read for the gratification of curiosity, then he must peruse the works mentioned by the Bishop, with many more; and the order recommended is a very good one:—but, if he should desire to study the mathematics in their application to mechanics, physical astronomy, &c. then he must forego the examination of those methods which are not essential to the investigation of truth, for that of the compendious methods invented and improved by modern mathematicians. "Art is long, and life is short:" we cannot grasp every thing: science, in its progress, continually throws aside the treatises by which it advanced; and in a few years, the *Principia* of Newton will be viewed merely as a monument of the mighty genius by which it was composed.

Having

Having laid down the course of study to be pursued by the young mathematician, the Bishop thus concludes his preface:

'From this period we leave the Student to the direction of his own taste and genius. The Elementary knowlege, and the Practical habits with which we have furnished him, will enable him to make his own way in any branch of Mathematics pure or mixed, to which his inclination or his pursuits may lead him. Whatever belongs to such Elementary Institution, we well know also, is that which the University of OXFORD is at all times anxious to offer to her Sons, considering Mathematical knowlege as a distinguished branch (but as a branch only) of that general literature, without which the character of the Scholar is never complete; and thinking still further, that even to those who are to receive the high commission of *Stewards of the Mysteries of* GOD, a due portion of this knowledge, in connection with the other studies requisite for the profession of *Theology*, (but not otherwise than in such connection) must ever be an acquirement of the greatest use and importance.'

The first treatise, as we have already mentioned, contains the arithmetic of fractions; and though, in some instances, we are of opinion that more compendious methods of deduction might have been used, yet the doctrine of fractions is laid down with much accuracy and perspicuity; especially that part which relates to decimal fractions and circulating decimals.—Towards the end of this division, the R. R. author shews how to express the length of the chord of a quadrantal arc, of an equilateral triangle inscribed in a circle, of the chord of an arc of 30°, of the sides of equilateral pentagons and pentedecagons inscribed in circles, &c.

The next tract relates to Plane Trigonometry; and here is introduced that which has injudiciously been omitted in most treatises, the method of determining the chord of the supplement of a multiple arc in terms of the chord of the supplement of the simple arc: whence the author afterward shews how to deduce the equations x^2-2, x^3-3x.—and x^4-4x^2+2, &c. which were first discovered by Vieta.—This portion of the work contains also many useful propositions, very clearly explained; and a method of calculating the line of arc 1′, extracted from the Trigonometry of Nikiten and Souvoroff. In treating of the quadrature of the circle, Bp. Horsley remarks, among other judicious observations, that the series given by Newton for deducing the sine of an arc z, viz: $z-\frac{z^3}{1.2.3}+\frac{z^5}{1.2.3.4.5}$, &c. does not give the sine to great accuracy except the arc z be small:—this is true: but it is so well known by all mathematicians, that the author seems to have created an erroneous

erroneous notion for the sake of correcting it. For calculating the sine of 1° and 30′, however, the series $z - \frac{z^3}{1.2.3.}$, &c. is sufficiently converging; and then, from this formula,

$$\text{Sin.}(a+2a') = \text{sin.}(a+a') + \text{sin.}(a+a') - \text{sin.}\, a - \text{sin.}(a+a') \left(2 \text{ sin.} \frac{a'}{2}\right)^2$$

we have, putting $a = 0°$, $a = 1°$, $a = 2°$, $a' = 1°$, &c.

Sin. $2° =$ sin. $1° +$ (sin. $1° -$ sin. $0°$) $-$ sin. $1°$ (2 sin. 30′)²

Sin. $3° =$ sin. $2° +$ (sin. $2° -$ sin. $1°$) $-$ sin. $2°$ (2 sin. 30′)²

Sin. 4°, &c.

and for large arcs, use this theorem:

Sin. $(60 + a) =$ sin. $(60 - a) +$ sin. a.

Book 2d relates to Spherical Trigonometry, and differs in its order and method from the generality of treatises. In the beginning, a definition seems to be deficient, by which a spherical angle should be made to be the same as the angle formed by the tangents to the two arcs, at their point of intersection.

In the appendix to the Trigonometry of the Sphere, the Bishop adds the solutions of two theorems rarely to be found in any late author; and of these theorems he thus speaks:

'It is uncertain to whom the invention of these two noble Theorems is to be ascribed. The first is not found, as far as I know, in any writer older than Menelaus, nor the second in any older than Ptolemy. The two made the whole of Ptolemy's Spherical Trigonometry. They are still of great importance; for, as they are easy to be remembered, and the solutions of all the cases, except those two, when three sides are given, to find the angles, or the three angles, to find the sides, are easily derived from them; they may be of use when a table of the cases is not at hand.'

The next part of the work treats on the Projections of the Sphere, divided into four books;—1. on Cylindric Sections; 2. on Orthographic Projection; 3. on Stereographic; 4. on Gnomonic. Great ability is here displayed, and there are many passages which we should be desirous of quoting: but the following scholion in the 3d book can alone be conveniently extracted:

'These two principal Projections of the Sphere, the Orthographic and the Stereographic, have each their peculiar advantages and their peculiar defects. But, upon the whole, the Stereographic is far the best fitted for general use.

'It is an advantage of the Orthographic, that the whole is limited by the circumference of the primitive circle. But this is attended with a great inconvenience, that the parts near the circumferenee are excessively fore-shortened.

'In

'In the Stereographic, it is a very great disadvantage, that the regions near the eye go off to infinite distances. There is in some cases a remedy for this; namely, to make two distinct projections of the opposite hemispheres, placing the eye alternately, first in one, then in the opposite pole of the primitive. This however is a remedy which all cases do not admit. And the expansion of the circumocular parts, in projection, is often very inconvenient. But the fore-shortening of the marginal parts in the Orthographic is, in all cases, without remedy.

'The great imperfection of the Orthographic is, that every thing in the projection has a double meaning. A single point in the projection represents two on the surface of the sphere, and every circle, and every ellipsis two circles. Whereas in the Stereographic, every original has its distinct image, and every image its distinct original. So that one thing cannot be confounded with another. In the Orthographic, many circles are projected upon ellipses; in the Stereographic, all upon right lines or circles. In the Stereographic, projected angles are equal to their originals, on the surface of the sphere; which obtains in the Orthographic in particular cases only. The Stereographic therefore is of universal use in the Practical Geometry of the Sphere; the use of the Orthographic is confined to some particular problems.

'The ancient astronomers made much use of an Orthographic Projection of the Celestial Sphere upon the plane of the colure of the solstices. This they called the Analemma. They chose the colure of the solstices for the plane of projection, because many of the principal circles upon this plane, fall upon right lines; namely, the equator, and all its parallels; the ecliptic, and all its parallels; the colure of the equinoxes, and all its parallels; and the horizon, and all its parallels, if the Projection be made for that instant of time, at any given place, when ♋ or ♑ culminate.

'The execution of the Orthographic Projection follows so immediately from the theory laid down, that it would be abuse of time and labour to go about to detail it in distinct Problems. In the Stereographic, it may be useful briefly to propound the Problems in the proper order, and give the solution of each in the most general case. The most general cases will be sufficient, for the whole subject is so very easy, that no one who possesses the principles, can be at a loss to deduce for himself the compendia of operation, which particular cases may afford.'

The last tract in this collection relates to the Figure of the Earth, as deducible from observation. The principle on which the solution of the problem is made to depend is, that similar arcs of an ellipse, so small as to differ insensibly from circular arcs, are as radii of curvature: the radius of curvature in the ellipse, being as the cube of the diameter, conjugate to that which passes through the point of osculation;—which property is a consequence of the 18th proposition of the 5th book of Hamilton's Conics.

If it be the intention of the University of Oxford, as we have heard, to introduce the study of mathematics into their system of Education, it may now with propriety and benefit to itself testify its gratitude towards a learned and distinguished member, by employing the present treatise as a book of Lecture and reference;—a treatise which, in the words of the Preface, may be truly said to be 'plain enough for the learner, and adapted at the same time to the taste of the scholar.'

R. Wood.

ART. XVI. *Archæologia:* or, Miscellaneous Tracts relating to Antiquity; published by the Society of Antiquaries of London. Vol. XIII.* 4to. pp. 435. 1l. 11s. 6d. Boards. White, Bickerstaff, &c. 1800.

THIS volume opens with a letter to the President from the Abbé Mann, intended principally as an expression of gratitude and respect, for the favour which the Abbé had received in being admitted an honorary member of this learned Society, but giving also an account of what is supposed to have been *a Roman Camp, in Westphalia.* From the number of *tumuli*, or barrows placed on it, however, the ground rather appears to have been a field of battle; and though the description is amusing, it is not very satisfactory. At some distance, is another spot which bears a greater resemblance to a camp: but all is involved in obscurity.

The article which follows may prove more interesting: it consists of *Observations on Cecily, Duchess of York*, daughter of Ralph de Nevil, Earl of Westmoreland and of Richmond;—is communicated by the Rev. Mark Noble. This Lady's mother was Joan, daughter of the Duke of Lancaster by his last Duchess, but born before marriage, and consequently illegitimate. Few persons, as it is here observed, have lived to see such great revolutions in their family as were witnessed by this Duchess. 'She saw her husband, when just ascending the steps of the throne, by his rashness, killed in battle, and his head, separated from his body, in derision crowned with a paper diadem. She lived in the reigns of five sovereigns; she saw the crown of France wrested from the infant brow of king Henry VI., and she saw him deprived of that of England, restored, again dethroned, and his innocent blood cruelly spilt. She saw her son, king Edward IV. crowned, dethroned, restored, and cut off by his intemperance at an early age. She saw her grandson, king Edward V., on the throne, but de-

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* See M. Rev. N. S. vol. xxiv. p. 298. and 388. for an account of Vol. XII.

prived

prived of his sceptre, imprisoned, and murdered, by whom, and when, perhaps she never knew. She saw her youngest son, king Richard III., usurp the regal honours, and lose them soon after, with his life, when not more than thirty-two, or at the most thirty-five years of age; and finally, she saw the enemy of her family, who had vanquished him, proclaimed by the name of king Henry VII.' It should be added that, though 'she saw the crown go to an illegitimate stem of the Lancastrian line,' it might be some satisfaction to her to have it settled in her issue by the marriage of king Henry VII., with her eldest grand-daughter, Elizabeth, the heir of king Edward IV.; and she is said also to have seen several children of this union:—but it must have been painful to remark the hatred towards her house, which Henry conceived and cherished. However, it is observed, 'Cecily's venerable age and virtues prevented the royal miser from stripping her of the rich dower she possessed.' Berkhampstead castle, Herts, of which scarcely a vestige now remains, was her favourite residence.—Mr. Noble concludes by saying, 'these are the observations that have occurred to me in contemplating the eventful life of Cecily, Duchess of York, from whom all the succeeding sovereigns of England are descended. It was the period of "illustrious unfortunates," owing to the constant revolutions that followed fast on each other. Wretchedness marked the fate of the Plantagenets and the Nevils, alike remembered for their ambition and their crimes. The de la Poles were the only family of that time who rose from trade to splendour, and it even exceeded the Nevils in dignity, in power, and in misfortunes.'

Mr. Noble also communicates the two short articles which follow; one exhibiting a gold *medal* struck by king Charles I. on the birth of prince Charles, the motto, *reddat avos*, and in fine preservation; the other a gold *coin*, probably struck at York, and of the value of three shillings:—both are considered as uniques, and deemed curious.

A complete List of the Royal Navy of England in 1599, *extracted from an original Manuscript in the Possession of Dr. Leith of Greenwich, and exhibited to the Society*, by William Latham, Esq.—Here is a long catalogue of ships and artillery; and the reader will probably find himself puzzled amid *sakers*, *mynions*, *falcons*, *portpecehalls*, *fowler-halls*, *curtalls*, &c. It is, however, a curiosity, and serves to illustrate the vast improvements and attainments which have, of later years, been made in nautical affairs.

In our account of the xiith volume of this work, particular notice was taken of a dissertation on the Anglo-Norman poets,

of the twelfth century, by the Abbé *de la Rue.* Another letter from this Gentleman is now translated and communicated by Francis Douce, Esq. relative to *the Life and Writings of Mary, an Anglo-Norman Poetess of the 13th Century.*—Very little is known of this Lady's personal history, and it is quite uncertain in what province of France she was born: probably, Normandy or Bretagne. In the Abbe's opinion, however, she may with great propriety be regarded as the Sappho of her age. 'I am ignorant, (he adds,) if she had much self-love, but I doubt very much whether, in taking up her pen, she seriously thought about posterity; it should rather seem that she was solicitous to be personally known only at the time she lived in. The silence or the modesty of the Lady has contributed, in a great degree, to conceal from us the names of those illustrious persons whose patronage her talents deserved. I shall endeavour to find out her Mecænases.' The fruit of this search is, that he fixes on king Henry III. and William Longsword, natural son of Henry II., created Earl of Salisbury, as two of Mary's protectors. Much attention and ingenuity are displayed on the subject: but we can only add that her works, which remain in manuscript in the British Museum, &c. consist of *Lays*, *Fables*, and *a Tale of St. Patrick's Purgatory.*—The Abbé appears to be very zealous in the cause, and bestows the highest encomiums on the accuracy, skill, taste, and sensibility of this Lady; who, he says, 'always speaks to the soul, calls forth all its feelings, and very frequently throws it into the utmost consternation.'

The Rev. John Brand (the Secretary) gives an *Account of Inscriptions discovered on the Walls of an Apartment in the Tower of London.*—A room, antiently the place of confinement for state-prisoners, has been lately converted to a different use; and in consequence of this alteration, a number of inscriptions have been discovered on the walls, probably made with nails, and undoubted autographs of the unfortunate tenants of this once dreary mansion. The first here mentioned is a curious piece of sculpture; executed, as it appears, within a month, by John Dudley, Duke of Northumberland, who was beheaded 22d of August 1553. The amiable and unfortunate Lady Jane Gray appears next, or is supposed to appear, by the name *Jane* being written on different sides of the room. Philip Howard, Earl of Arundel, beheaded A. D. 1572, has subscribed his name to this sentence, *Quanto plus afflictionis pro Christo in hoc sæculo, tanto plus gloriæ cum Christo in futuro,* which is said to be remarkably adapted to the character that has been left of him. The additions beneath are conjectured to have been made by subsequent Roman catholic prisoners, as forming an eulogium

eulogium on his memory; *Gloriâ et honore eum coronasti, Domine!* and—*In memoria æternâ erit justus;* the latter part of the verse, "*but* the name of the wicked shall rot," is omitted, probably through fear of the party then in power, though they are strongly intimated by the addition of the first word, '*At.*'—Several other inscriptions and sculptures are recorded, some of which are prettily executed; and a short explanation or history is added, where it could be obtained. The last in the list is *Hew* Draper, who was suspected to be a conjuror or sorcerer, and was committed A. D. 1560; and (which appears remarkable,) 'by the accusation of one John Mann, *an astronomer.*' Whatever this Hugh Draper might be, the sphere which he executed, according to the engraving here given, appears to be very ingenious.

Of the Number which follows, it is sufficient to insert the title; *Copy of an Original, entitled* "*Instructions for every Centioner to observe duringe the Continuance of the French Fleet uppon this Cost, untill Knowledge shall be had of their Dispersement, given by Sir* George Carye, *Captein, this fyrst of September,* 1586." *Communicated by* Sir William Musgrave, Bart.

In a letter from William George Maton, M.B. F.A.S. we find a short relation of *the Fall of some of the Stones of Stonehenge.* Some people employed at the plough, at the distance of half a mile, in January 1797, suddenly felt a considerable concussion, or jarring of the ground; which was occasioned, as they afterward perceived, by the fall of two of the largest stones and their impost. That the concussion should have been so sensible will not appear incredible, when it is remembered that, according to Mr. Maton's calculation, the ponderosity of the entire *trilithon* will be found to be nearly 70 tons. It is supposed that 'the immediate cause of this memorable change in the state of Stonehenge must have been the sudden and rapid thaw; which began the day before the stones fell, succeeding a very deep snow.' The precise time of any prior alteration is not found on record; 'it is therefore probable that none may have happened for several centuries; and the late accident, being the only circumstance ascertained with exactness, may be considered as a remarkable æra in the history of this noble monument of ancient art.'

The Rev. Samuel Denne, a frequent contributor to these volumes, is the author of the two ensuing articles; each of which discovers great attention, accuracy, and ingenuity: they relate *to a date or numeral Inscription on a Barn, and also on an oust-house or kiln, at Preston-hall, Kent,* together with another *on the Mantle-tree of a Chimney in the Rectory-house of Helmdon, Northamptonshire.* From these dates, it has been inferred that the

the *Arabian numerals*, now in common use, were known and employed in England, in the 13th century, or perhaps at a more early period: but Mr. Denne candidly and successfully (as we think) controverts the conclusion; so far, at least, as to make it appear that, though Matthew Paris (who died A.D. 1259,) had some acquaintance with the *numerals* in question, it was very long after his time that they became an object of serious attention, and were brought into general use. This is indeed surprising, when it is considered what difficulty and confusion often attended the calculations by *Roman capitals:* yet such, probably, was the fact.—Mr. Denne remarks: 'Mortifying it is, as well as astonishing, to observe the slow progress formerly made in acquiring a science, a proficiency in which is now so easily obtained; for a stripling at a school in a country village can now, by the help of these figures, in a few minutes work a sum that the eminent Roger Bacon could not have reckoned, perhaps, in a whole day, with Roman capitals: and such being the benefit which has accrued to people of every degree and station in society by this admirable discovery, much is it to be regretted that neither the sagacious inventors, or Indians, or Arabians, nor the introducers of it into England or Europe, should be known, notwithstanding the assiduous and commendable endeavours of many learned men to rescue their names from oblivion.'

The Rev. Samuel Ayscough is the contributor of the twelfth article in this collection, containing *Copies of two Manuscripts on the most proper Method of Defence against Invasion*, by Mr. Waad.—This gentleman appears to have been variously and honourably employed in the reign of Queen Elizabeth. He offers some sensible advice on the subject in question, and is particularly earnest in his exhortations to avoid an immediate battle; 'being (says he) the only thing for an invader to seek, and for a defender to shun. For the one doth hazard but his people, and hath a lot to win a kingdom; the other in losing of the battle hath frequently lost his crown. A battle is the last refuge, and not to be yielded unto by the defendant until such time as he and his people be made desperate, or until opportunity shall offer unto him great advantage;—albeit I would wish our nation to be well exercised and trained, (for battle) being a thing of great moment, yet to be used in our own country, as the sheet anchor and last refuge of all.'

The preceding paper is selected from the British Museum; as is also the next by the same hand, *Copy of a Manuscript intitled, "An Expedient or Meanes in want of Money to pay the Sea and Land Forces, or as many of them as shall be thought expedient without Money in this Year of an almost universal Povertie of the*

English Nation, by Fabian Philipps.—The expedient here chiefly proposed is to circulate coin of an inferior or base metal, for a limited time, under sufficient security of its being then replaced by that of real value; and the writer repeatedly laments the export of our own good money to foreign countries. The Paper is dated, July, 1667.

A short Letter from the Rev. John Brand gives the *Explanation of a Seal of Netley Abbey*. In Tanner's *Notitia Monastica*, *Edwardstow* occurs as the old name of this spot. '*Stow* is well known to signify *place*, latinized on this seal by "*Stowe Sancti Edwardi*," which was probably the original name of the monastery, and this its *first* seal, representing the *Virgin Mary and Child*, with *St. Edward*, with uplifted hands kneeling before her.' This famous abbey seems to have been distinguished by the several titles of—*Netteley*—*Letteley*—*Edwardstow*—or *De loco S. Edwardi juxta Southampton*. It was founded in the year 1239 by king Henry III. Mr. Brand's wish for an accurate drawing of so 'great a curiosity' is now gratified.—The same gentleman furnishes an *Explanation of a Seal of the Abbey of Lundores, in Scotland*. The inscription on this seal runs thus, *Sigillum Sancte Marie et Sci Andree de Lundo* ***; here a piece has been broken off; and it is not wonderful that inquirers were inclined to suppose that the last word had some connexion with London: but Mr. Brand perceives that part of the *r* is still visible, and he does not doubt that the letters *e* and *s* followed it. His conjecture is well supported by the second volume of Dugdale's *Monasticon*; at the end of which, among the *Cœnobia Scotica*, is *luckily* preserved (as he tells us) the charter of the foundation of *an Abbey for Monks at Lundores, dedicated to the Virgin Mary and St. Andrew*. This rich house, in the forest on the river Tay, by the town of Newburgh, in Fifeshire, is said to have been founded by David Earl of Huntingdon, brother to William king of Scotland, on his return from the holy land, A. D. 1178. The seal here described might be the first and original one of this fraternity. *Lundores*, we are informed, was erected into a temporary barony by James VI. A. D. 1600, in favour of Patric Lesly, son of Andrew, Earl of Rothes.

The short tract which next occurs may be regarded as *curious*, viz. *Copy of an original Instrument, dated 25th November 1149, concerning the Church-yard of St. Mary Magdalen in Milk-street, London*, exhibited to the Society by Thomas Loggen, Esq. It begins in Latin, and with great solemnity delivers the asseveration (the subject of which is imparted in English) 'how that a pece of voide grounde in the parish was comnly named and called it's *chirche-yard*—And that there stode a *crosse* in

in and uppon the same voide grounde, of the height of a man or more. And that the same *crosse was worshipped by the parishens* there *as crosses be comonly worshipped in other Chirche-yards.*'

Copy of an original Letter from Queen Elizabeth to the Earl of Warwick, exhibited by Peter Renouard, Esq. 'in whose family this curious paper has long remained.' The letter relates to a particular appointment committed to the charge of Ambrose Dudley, Earl of Warwick, in the year 1563: he was lieutenant and captain-general of her Majesty's forces, and was therefore directed to fortify and defend Newhaven (Havre de Grace) against the attempts of the French. The Queen here represents the importance of the object, applauds the conduct of the Earl and those under his command, and assures them that nothing shall be wanting for their assistance and encouragement.—The last paragraph is somewhat peculiar, and is written with her own hand;—"My deare Warwik, if your honor and my desir could accord with the los of the nidfuls fingar I kipe God helpe me so in my most nide as I wold gladly lis that one joint for your safe abode with me, but sins I can not that I wold, I wil do that I may, and wil rather drinke in an asin cup than you or your's shude not be soccerd both by sea and land, yea and that with all spede possible, and let this my scribling hand witness it to them all." The Earl, however, did not succeed; not, as it seems, through any failure in him or his men, but through the want of timely aid. He was obliged to capitulate, and to content himself with the liberty of withdrawing his garrison; with the mortification, soon after having signed the articles, of seeing Admiral Clinton appear off the harbour with a sufficient reinforcement. Hume observes, (vol. v. p. 80.) that "Queen Elizabeth's usual vigour and foresight did not appear in this transaction."

[*To be continued.*]

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ART. XVII. *Elements of Chemistry and Natural History.* To which is prefixed, the Philosophy of Chemistry. By A. F. Fourcroy. Fifth Edition, with Notes by John Thomson, Surgeon, Edinburgh. 3 Vols. 8vo. 1l. 11s. 6d. Boards. Mundell and Son, Edinburgh.—Longman and Rees, London. 1800.

THE elements of chemistry, by Fourcroy, have been so frequently introduced to public notice in different editions and translations, that it would be superfluous here to make any remarks on the work: but this edition has a claim to our attention, on account of the notes which have been added by

the editor; and which we have, indeed, perused with much pleasure. Mr. Thomson has not, like many editors, contented himself with giving the text of his author, with only a few superficial remarks; on the contrary, he has added many copious and valuable notes to each chapter, the selection and number of which discover much judgment, and considerable extent of chemical reading. By these notes, also, this edition has in a great measure been made to keep pace with the rapid progress of chemical science, since the publication of the original work.

In the advertisement prefixed to Vol. I. Mr. Thomson very candidly mentions that he has adhered to the translation of Mr. Nicholson; and that the translation of *the Philosophy of Chemistry*, which he has added, is also executed by another person. The notes on the animal kingdom, part 4, are particularly instructive and interesting. The same may indeed be said nearly of the whole; and we have no doubt that this edition will be found highly useful to chemical students. The typographical errors, however, are rather numerous; which, with some small mistakes that are evidently accidental, Mr. Thomson will undoubtedly correct in a future edition.

In page 189 of Vol. I. mention is made of Professor Pictet's curious experiment of apparently reflected cold; concerning which, we think it necessary to make a few remarks.

This experiment was repeated by M. Pictet himself, a few months ago, at the Royal Institution, in the presence of several eminent men of science; and there did not appear any reason for doubting that cold could really be reflected: but, without intending to lessen the merit of M. Pictet, we must observe that the first and original experiment of this kind was made about 135 years ago, by the Academy *del Cimento*, and may be found in the records of the experiments published by the secretary of that academy in 1667, and afterward translated into English in 1684. Nothing can exceed the modesty and candour with which this remarkable experiment is there related; and, as the work may not be in the hands of many of our readers, we here transcribe the account from the English edition:

"*Of reflected Cold.*

"We were willing to try, if a concave glass set before a mass of 500 lbs. of ice, made any sensible repercussion of cold upon a very nice thermometer of 400 deg. placed in its focus. The truth is, it immediately began to subside, but by reason of the nearness of the ice, 'twas doubtful whether the direct, or reflected rays of cold were more efficacious: upon this

account, we thought of covering the glass, and (whatever may be the cause) the spirit of wine did indeed presently begin to rise; for all this, we dare not be positive, but there might be some other cause thereof, besides the want of the reflection from the glass; since we were deficient in making all the trials necessary to clear the experiment*." **Hatch.**

ART. XVIII. *Gleanings in England;* descriptive of the Countenance, Mind, and Character of the Country. By Mr. Pratt. 2 Vols. 8vo. 17s. Boards. Longman and Rees.

STILL mounted on his sentimental hobby-horse, Mr. Pratt continues his digressive remarks, exactly in the style of his former volumes†. We may with propriety term him, in his literary journies,

"A safe companion, and an easy friend;"

and, as he seems to have written while he jogged on his way, so those who run may read his journal. Delineations of character are, indeed, more interesting than outlines of landscape, and of the former Mr. Pratt has been profuse. He may be considered, in some degree, as the *Teniers* of English tourists; and whoever would enjoy the peculiarities of our loungers at watering-places, and our rustics of different classes, will be amply gratified by his volumes.

We must confess, however, that, though this author's manner and his descriptions are generally pleasing, his work is rather too full of verbosity, and of adventures with persons in the lower ranks of life; and that, though his morality and sentimentality are usually praiseworthy, they are too frequently excited by trifling objects, or displayed in superabundance. The first of the present volumes is particularly open to these remarks.

In a prefatory advertisement, Mr. Pratt thus explains the leading motives and design of this publication:

"The author's grand view has been, what, indeed, will be but repetition to state here—though that part of the plan cannot be too soon known—to present a *just and honourable idea of this important Country*, as a whole, from—not a mechanical, not a methodical,—but fair and liberal survey of its parts, taken in several journies upon its animated surface, with *descriptions* from immediate objects, and *reflections* moral, natural, political, or personal; either in connection with, or arising out of them. And the *motive* which suggested this

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* *Essays of Natural Experiments made in the Academy del Cimento.* London, 1684.—Page 103.

† See Rev. N. S. vol. xix. p. 300. and xxi. p. 353.

plan,—besides a compliance with the wishes of an amiable *Foreigner*, who, in a perusal of many contradictory accounts, was still at fault how to settle our pretensions in any of the above-mentioned particulars,—was, and is, a most ardent desire, to promote *domestic* peace and union! If the plan were executed but half as well, as the sentiment that gave it birth is sincere and commendable, the content of the author's heart, which has been glowing even in the *attempt*, would indeed be absolute!'

One of the features of this country, which Mr. Pratt here holds up to view, and to the admiration of wondering foreigners, is the institution of *Mail Coaches*; the rapidity and convenience of which he has fairly represented: but we must correct one part of this picture, the too high colouring of which might induce a foreigner to distrust the whole delineation: viz. the superior speed of our Post Chaises, which is stated to be more than double, nearly treble, that of the mails. So far from this being the case, the difference is not in general great; especially on the average of a long journey, and in travelling by night.—Of a similar nature is another characteristic, exhibited by this patriotic author as highly favorable to England; viz. the complete accommodation and real comforts of the Inns and Taverns. This praise is certainly merited; and Mr. Pratt has dignified it by adding the sonorous eulogy which Dr. Johnson bestowed on these favourite receptacles.

Vol. I. is devoted almost wholly to Norfolk, and gives many amusing particulars respecting Lynn, Houghton, Fakenham, Rainham, Walsingham, (a singular character recorded) Cromer, &c. with a digression to Ireland, and some observations and details respecting the late insurrection in that country.—Of Cromer, which has now become a place of fashionable resort for sea-bathing, the author writes much at length, and with great commendation.

We shall present to our readers a part of Mr. Pratt's delineation of the English character, with his recipe for dispelling the reserve and coldness which are usually attributed to it:

'It has been well observed, that the minds of the English, like their climate, are chequered with an extraordinary variety; which seems, indeed, to have been infused into the whole system of nature, and which is most agreeable where the scene is often changing. In most other countries, my friend, there is more of uniformity, both of clime and of character. In those, allowing for now and then a solitary Mannerist, or,—if you will grant me the word—Whimmist, there are not more distinctions of characters than of classes. The two degrees of high and low, with a sort of undefined intermediate body, form the whole nation, from the most stately order of the *premier Noblesse*, to the *petit Baron*, the distance of whose veins from the rich and *ichorous* blood which the former derives from the unfathomable

fathomable ocean of ancestry, is regarded but as a common puddle, dribbling through the system, impoverishing the very spirit, and unfitting him to mix a rivulet so sullied and scanty, with the crimson torrent that ennobles every artery of the *first order*.—

'But a social Traveller cannot go an hundred yards on ENGLISH ground without meeting something in one person, if he meets any body, that separates him from another, either in the *manner or the matter of his character*; and it is fifty to one but the next person he encounters will shew himself off as differently, as if he were of a different country; even should the discourse with the first man be continued with the second.

'A Dutch passage-boat, for instance, and an English stage-coach, will bring this into apt illustration. In the former, you will find a pipe in every month, and a long pause, broken only by the necessity of changing the barge, or by some solemn observation, for the most part, as ponderous as the vehicle in which you are drawn, and stagnant as the canal whereon you soporifically move. If the *great subject*, as they call it, (Trade) forces their thick and melancholy spirits through the fumes that envelop them—I speak chiefly of commercial people, for I have shewn, and you will admit, faithfully, there are very merry and light Dutchmen—yea, and Dutch women too—they seem to labour through their clouds, and you hear but one sound upon the one theme. *Gelt, gelt, gelt—Money, money, money—That is my demand, what is your offer?* Half an hour after the question, the breath is drawn in, to negative by a nod, or sent off with a puff into a fuliginous affirmative: yes, or no, often beginning and ending the compact. And one trade is the echo of another trade, as similar to each other as their pipes.

'An English stage-coach, on the contrary, is usually filled with as many unimitating beings, as there are places to receive them. There is something peculiar and *appropriate* in every passenger, whether male or female; and they are not only strongly marked from each other in the casual journey that associates them for the moment, but very frequently each is distinct from every other of his family. The thoughts, and the mode of expressing them, belong exclusively, to him or to herself; and though the principles of the heart, whether bad or good, are the same all over the world, it is here, chiefly, that those principles are displayed in an unnumbered variety of forms, I had almost said of fancy dresses, even like characters at a masque, according to the particular humour, or disposition of the wearer.

'This diversity amongst us may be attributed, partly to the freedom of our government, 'which, without stilting some men into giants, and dwarfing others, preserves the due line of gradation, investing every individual with a just sense of himself, and of his happy situation.'—

'The British constitution allows to every being that contributes to form it, whatever be his state or station, an opportunity to *reverence himself*; and though this, sometimes, encourages an over-rated estimate, it preserves, upon the whole, the due measure and weight, civil, political and religious.

'From whatever cause, however, our variegation from each other, in opinion and in action, arises, its effect is always pleasant, and often useful, to a traveller. It offers him, in every direction of his route, interesting, amusive, or singular companions by the way; and notwithstanding the deep national reserve, and coldness, imputed to my countrymen and women, and in which, it must be owned, they too often entrench themselves, they may be all brought into conversation if a traveller is resolved upon it; and however thick may be the ice at first setting out, the chilling influence will yield by degrees; a few good-natured remarks will cheer the furface like morning sunshine on the frozen current; the first subject that calls out a human affection, will begin the thaw, and an ingenuous exchange of those still, small, civilities that make up the great comforts of life, will, like the noon-tide ray, loosen yet more the stream from its impediments; the warm beams of the imagination, or the yet more ardent ones of the heart, will break out upon it; and there, joining each other, will melt away every remaining coldness and obstruction, so as to produce a flow of good humour, or good sense, during the rest of the voyage or journey, whether it be of a day, a month, or a year: perhaps, for the residue of the mortal travel of the parties. The ice, which, as it were, shuts up the lips, and closes the heart of an Englishman to strangers, whether of his own or other countries, being once thus unlocked, and the free current of his estimable heart disencumbered, the blood that animates it flows copiously towards the being who has in this manner subdued the frost, and ever after it exchanges with that being the permanent glow of friendship, or of love.

'Much, therefore, depends on our taking out with us, a sufficient stock of that with which you, I know, are always amply provided—COURTESY—without a supply of which no man should attempt to go beyond the limit of his own garden-walls, and, scarcely indeed, to their extent; for a gilded fly, an obstructing flower, an obtrusive sunbeam, or a few heat-drops falling in his path, might annoy and put him out of temper with heaven and earth. The courtesy I write of, is, in truth, as necessary to a traveller as his passport, or his letters of credit, and it will be current where all other recommendations and introductions fail. It will *create* urbanity in the bosom where it was unknown before. It is solid as sterling gold, lighter of carriage than an English bank-bill, and though all Europe confesses the intrinsic value and utility of both these, at home and abroad, unnumbered instances have met my eye in this jarring world, where an ounce of *courtesy* would have outweighed, in the purchase of human happiness or human content, more than our banks or treasuries could buy. "A sweet word not only turneth away wrath," but it leads to knowledge, to wisdom, to conciliation, to honour, pleasure and repose. It conducts to the best felicities of life, and attains the most gracious ends by the easiest means.'

G.2.

A favourable specimen of this volume may also be given, by extracting the author's remarks on *Literary Journals*; a subject in which, of course, we find ourselves particularly interested:

'There

'There cannot be a doubt but that while the liberty of the press, as to the freedom of publication, shall be sacred—and on this side of licentiousness, it ought to be uncontrolled—it is equally just that the sense and nonsense which indiscriminately issue from the immense vehicle of communication, should be subject to vigilant examination; otherwise the whole world would be over-run with abortions of the mind. We want the assistance of some guides, who will take upon themselves the trouble of separating the good from the bad, and wade through the troubled deep of literature, in order, if we may be permitted a continuation of the figure, to collect the pearls and gems, and to describe the useless weeds, whether swimming on the surface, or lying at the muddy bottom. A stupendous labour! if we consider the great disproportion betwixt the former and the latter. Applying this to the case in point, and it is by no means inapposite, a reader unused to such arduous undertakings, can image to himself no task so overwhelming as that of being left unaided to search for instruction in the mass of productions which are every year piled, mountain high, before him. We will even suppose whatever is most beautiful in fancy, captivating to the heart, and informing to the intellect, under his eye: but he startles at the view of the enormous *quantity*, nor can any degree of excellence in the *quality* reconcile, or, indeed, justify him,—in a life so brief, and so connected with other duties as the present—to the immeasurable fatigue of such a task. Even if there should be found a few persevering spirits, endowed with a fortitude to peruse all that comes to hand, the profit would be no ways answerable to the pain by which it must be procured. For this reason, it would be proper that there should be some professional inspectors to direct our choice, even were literary excellence and defect nearly equal. But when the average is on a ratio of at least ninety in the hundred in the scale of compositions *dead weight*, there is not, perhaps, any office so necessary as his, who, with patient circumspection, will examine the great account betwixt wisdom and folly, and settle the balance.

'It is not, therefore, possible to conceive a more useful institution than that of a Literary Journal, when conducted with various ability and inflexible justice; nor can it be denied that a great variety of articles, in every branch of literature, have been analysed on these principles; and a due proportion of good has thence resulted to the community.

'Numerous as are the critical reptiles above-mentioned, there are very many writers endued with the perseverance, judgment and candour, necessary to all the useful as well as valuable purposes I have just stated.

'We have to boast even at this day, of great and noble critics; and from most, indeed, in all of our Literary Journals, we find substantial evidence of unimpeachable judgment and unwarped integrity. It is not, however, to be expected, that any human association composed of many members, should be conducted on principles uniformly sagacious and correct. Were they to write apart, and consult together ultimately, there must even then often be a clash of sentiment, a dissonance of opinion.

'Yet,

'Yet, I am persuaded, the critics above-described, are the very persons who most reprobate the virulences, and regret the errors for which they are made responsible. The literary body cannot be supposed to separate, or seem to move a limb independently:—much less to commit themselves, and confederate against each other, by deploring the want of candour in some of their colleagues, and of capacity in others. Thus from their not being associated by congeniality, or chosen by consent—and yet under a kind of compact to hold together, and by the good faith that should be preserved in all treaties, bound to support one another in the way of a common cause—the errors, incongruities, adulations and virulences, which are observed occasionally to disfigure their journals, attach indiscriminately to all.

'A man must write from the spirit of envy, or from pique, or ignorance, if he assents not to these arguments, because there is monthly confirmation of them. And of the authors who have, individually, to complain of uncandid treatment, or partial representation, there cannot be one who has genius and candour, in his own mind and heart, but must see and feel there is often just criticism, in the very publication where his *own* performance may be slighted or aspersed.

'If, therefore, like every other valuable institution, abuse has crept into this; if prejudice and prepossession too often vault into the chair, and instead of its becoming a *Judgement-seat*, where the labours of the human mind are to have a fair trial, it is frequently a *secret Tribunal*, where the judges are wholly unknown, and the facts judged, so unfairly selected and argued, although formed into the most serious charges, that the work which ought to be condemned is acquitted, and the production that deserves to receive distinguished honours, is, by this ungenerous artifice, supposed to be guilty of all the imperfections imputed to it.—

'If, in what by a misnomer is called criticism, the mutilated parts of a book are sometimes given as specimens of its general character—If, in offering an author's argument without reference to the context—by which alone its force or feebleness is to be determined—the most important and admirable reasoning is torn from its antecedent and consequent, like a limb hacked from the body, and presented in a mangled state, to serve as a measure for the harmony and beauty of the whole; or if, which is not more generous, or reasonable, a frequently licentious, sometimes malignant display is made of ill-grounded *ridicule*—a power, by which all things, the most grave and sacred, however happy they may be, in their conception and delivery, are discoloured, distorted, tending to excite the very reverse impression of that they probably *would* have made, on a mind unseduced by the intemperate sally of misapplied or ill-tempered wit—and all this to indulge the miserable propensity of raising a laugh against what, even at worst, is, perhaps, the best effort of its author to please the public; and who, possibly, in the bitterness of his disappointment, weeps not only over the loss of that daily bread which the scorner earns by his taunts, but which the industrious author has often earned more honestly than his critic—

if,

if, while it must be owned there are numberless objects, which deserve to be assailed by all the powers of wit, this dangerous talent snatches the honest morsel from the lip of Genius, for the paltry triumph of saying "a good thing;"—if those compositions which deserve our reverence, and which, perhaps, have delighted even the defamer himself privately, have, nevertheless, been publicly sacrificed —If the attempt to turn performances of indubitable merit and labour into ridicule, by shewing them under absurd circumstances, is but too successfully practised—If, "the sovereigns of Reason, and the artificers and purveyors of our most exquisite pleasures,"—those of the intellect are unquestionably of that order—if the rightful Critic upon the human understanding, is, by the common and inevitable lot of all corporate bodies, thus unfortunately mixt with those critical usurpers, who with pontifical pride, fulminate their defamatory bulls against Genius and Learning, in ignorant pomposity or in rude impertinence.—If such accusations are well founded, depend upon it, those who are the true protectors, advocates, and guardians of Literature—the TRUE critics—even while by a sacred duty they are constrained to reprehend, punish, or wholly condemn some of the votaries of Science and the Muses, *they* are the persons most touched and aggrieved whenever the numerous pettifoggers of Literature, any of those unprincipled usurpers with whom, by imperious circumstances, they may be blended, have perplexed or lost the cause of real Genius or Learning. The verdict, it is true, is always given by the PUBLIC —our Literary Grand Jury—but, if by false reasoning, or false impression, by partial evidence, or by corrupt influence, it is practised upon and misguided, the sentence would of course be unjust, though it might have the sanction of a majority of the council and of the judges.'

Vol. II. opens with Cromer again, and gives the delineation of another singular character, with some humour and effect:—then a long digression on quackery:—a letter on *English Charities*, a theme, we sincerely believe, of well-earned praise:—journey to Thetford, adieu to Norfolk, and entrance into Suffolk:—Bury St. Edmund's, and Newmarket:—Cambridge, the Colleges, &c. Oxford, and its Colleges, &c. *:—Huntingdonshire, St. Ives, &c.—When treating of Newmarket and its environs, Mr. Pratt draws a gratifying portrait of a distinguished nobleman, which we copy with much pleasure:

'I cannot leave Suffolk without directing your attention to Euston-hall, not because it is a noble edifice belonging to one of the most distinguished of our British Peers, but, because its present Possessor, notwithstanding all that our great British, and still inscrutable Satirist, JUNIUS, may have said of him, is one who, at his country-seat, in his thriving farms, and comfort-brightening cottages, deserves to be placed amongst those first-rate Benefactors of mankind, which in the benignity of their orb, effuse their rays where light and heat are wanted!!

* Some strictures on these universities, and the account of them, are communicated by Dr. Mavor.

'The

'The Duke of Grafton goes his daily rounds of Benevolence! visits the cottages of Euston, Fakenham, &c. &c. in person, not only to *enquire*—for report made by a steward or other domestics in office, is sometimes wicked, and often partial—not, therefore, only to enquire, but to see—if the families, committed by pity and loving-kindness to his protection, are at ease, in health, in happiness—if wives, children, widows, orphans, *really* want any thing to make them so; which must sometimes be the case, although all his poor live rent-free.

'I have gleaned for you, also, another circumstance concerning this Nobleman. His Grace, I am just told by some of his *tenants*, whose information his very *enemies* will not presume to dispute, never raises his rents, nor, unless from flagitious conduct, changes his farmers—insomuch, that there has not been known to be any deviation from the family-line in the descent of his tenantry for upwards of a century. The husbandmen keep the even tenor of their way in all things.

'In a word, ever since my being within *reach* of oral and ocular evidence, I have, unseen and unknown to him, been upon the watch to catch the immediate REAL features of this Nobleman's mind, and just as I am about to quit my place of unobserved observation, I can conscientiously select for the motto of the above drawn portrait of this Nobleman, what the "honest Muse" of Pope has sung of the Man of Ross,

> "Him portion'd maids, apprentic'd orphans blest,
> The young who labour and the old who rest;
> He, like the Man of Ross, the sick relieves,
> Prescribes, attends, the medicine makes and gives."

People of high birth have been so generally the objects of the Poet's ridicule, and the very mark of their arrows, that every opportunity to rescue characters of this kind from the wantonness of wit, or the venom of envy, is not only a duty, but a delight, that gives one an exquisite sensation.'

The cruelty of the sports for which Newmarket is distinguished, as well as the degradation of manners now prevalent among the patrician votaries of horse-racing, are justly reprobated by the author; and he records, in contrast, two instances of remarkable benevolence towards this noble but suffering animal:

'We have to boast of a second Howard, my Friend, not inferior to the first, as to being merciful to his beast: An English Baronet, and, thank Heaven, he is still alive, (Sir Richard Hill of Hawkestone), cannot, indeed, vie with the high-toned jockies above-mentioned, who make money and sport by running and bleeding a poor animal to death; but, he can and does often repair the ruins, heal the bruises, and bind up the wounds of such as fashion or avarice, poverty or age, have brought low. For hapless and helpless steeds, under these circumstances, he has a warm shed, and a rich pasture. Nor is this sweet pity exercised in favour of his own steeds only. He purchases the way-worn, and the infirm, wherever he finds them; he rescues

rescues them from the labour to which they would be no longer equal, and he gives them the repose which age, misfortune, and honest servitude deserve on the purest principles of compassion.

'A similar plan of benevolence is adopted by the Honourable Henry Erskine, leading Advocate of the Scotch Bar, as his brother is of the English.'

Many political reflections, and a number of poetical effusions, contribute to diversify these volumes:—in the former, Mr. Pratt manifests the sincere lover of his country *: in the latter department of literature, his merits have been long appreciated by the public.

G. 2.

After all the tours that have made their appearance, we are still in want of a most important view of the actual state of the kingdom, with respect to its manufactures. The influence of this species of employment on the customs and morals of the people is astonishing, and it would find employment for very sagacious and philosophic observers. If Mr. Pratt would mingle rather more of this nature in his tours, and somewhat abate the sentimental part, he would probably obtain the applause of a much more numerous—or at least of a more discriminating—circle of readers.

Fer.

MONTHLY CATALOGUE,

For DECEMBER, 1801.

TRADE *and* COMMERCE.

Art. 19. *A Practical Book of Customs*, with Excise, upon all Foreign Articles imported; wherein is exhibited, at one View, the consolidated Customs, *and Branches as levied since that Period;* with the Law which imposed, Date of its Commencement, total Duty paid, and Drawback now allowed. Also Duties outwards, Bounties and Allowances on British Goods exported, those on the Fisheries, the Duties Coastwise, the Quarantine, Tonnage, and London-Dock Duties; and every Commercial Alteration and Addition, till the 5th of August, 1801: with Tables of Scavage, Baillage, Levant and Russia Duties, &c. &c. The whole intended to inform and assist Commercial Concerns in general. Large 8vo. 10s. 6d. To be had of Edward Mascall, at the Custom-House. 1801.

THE first edition of Mr. Mascall's very useful Book of Customs was noticed in our Review for December, 1799.—It were needless to repeat what we then observed, in regard to the general utility

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* We think that we here recognize, in one of the chapters of Vol. II. (Letter XVII.) the contents of a small pamphlet some time since circulated under the title of "Our good old Castle on the Rock." See Rev. N. S. vol. xxvii. p. 462.

of

of a work of this kind; we shall therefore, on the present occasion, speak only to the leading circumstances of the second edition:—in doing which, we cannot better acquit ourselves than by transcribing the author's own account of what he has performed, viz.

'The rapid sale the first edition of this work met with, and the continued solicitations of many friends who were unavoidably disappointed of copies, might have been deemed a sufficient inducement for publishing a second: but the principal consideration which influenced me to undertake the task, was a sense of that duty, which, in my public capacity, I owe to the commercial interest at large, being fully aware that, in a republication, I should have an opportunity of making many useful additions, and, at the same time, render some parts more clear and perspicuous; in particular, East-India goods, under the consolidated form, was found in practice to be less universally and clearly understood than it ought to be,—owing to many articles under that arrangement, which are *unrated* when imported by the East-India Company, standing as *rated* under every other circumstance of importation.

'In order to obviate that difficulty, I have, in this work, arranged all such articles into a table by themselves, with an immediate reference thereto. And in like manner the duties and drawbacks, respectively arising out of the Union Act, &c.—and every other movement of duties payable to the revenue, with reference in the Contents to the folio; conceiving it the most ready method of explanation and practice.'

We cannot but consider this book as the most complete work of the kind that has yet been offered to the public; particularly to the mercantile part of the first commercial nation in the world.

NATURAL HISTORY.

Art. 20. *The Natural History of the Tea-Tree*, with Observations on the Medical Qualities of Tea, and on the Effects of Tea-Drinking. A New Edition. By John Coakley Lettsom, M.D. 4to. pp. 102. With coloured Engravings. (No Price marked.) Dilly.

This splendid pamphlet contains a collection of every important circumstance relating to the Natural History of the Tea-Tree. The first edition, printed in 1772, we believe, escaped our notice:—the present is enlarged, and adorned with an additional number of prints.

We shall pass over the first part of this work, which is merely a compilation from different writers, in order to notice the *Medical History of Tea*; so long a subject of dispute among the Faculty.—Dr. Lettsom found that the odorous water, distilled from green tea, possessed narcotic qualities. The natives of China, from their experience of these properties in tea which retains its fragrance, never use tea till it has been kept for twelve months.

'The generality of healthy persons find themselves not apparently affected by the use of tea: it seems to them a grateful refreshment, both fitting them for labour and refreshing them after it. There are instances of persons who have drank it from their infancy, to old

age; have led, at the same time, active, if not laborious lives; and yet never felt any ill effects from the constant use of it.

'Where this has been the case, the subjects of both sexes were for the most part healthy, strong, active, and temperate. Amongst the less hardy and robust, we find complaints, which are ascribed to tea, by the parties themselves. Some complain that after a tea breakfast, they find themselves rather fluttered; their hands less steady in writing, or any other employment that requires an exact command of spirits. This probably soon goes off, and they feel no other injury from it. Others again bear it well in the morning, but from drinking it in the afternoon, find themselves very easily agitated, and affected with a kind of involuntary trembling.

'There are many people who cannot bear to drink a single dish of tea, without being immediately sick and disordered at the stomach: to some it gives excruciating pain about that part, attended with general tremours. But in general the most tender and delicate constitutions are most affected by the free use of tea; being frequently attacked with pains in the stomach and bowels; spasmodic affections, attended with a copious discharge of limpid urine, and great agitation of spirits on the least noise, hurry, or disturbance.'

Several cases are mentioned, in support of this general statement; and Dr. Lettsom adds that spitting of blood has been occasioned by breathing in an air loaded with the fine dust of tea:

'It is customary for those who deal largely in this article to mix different kinds together, so as to suit the different palates of their customers. This is generally performed in the back part of their shops, several chests perhaps being mixed together at the same time. Those who are much employed in this work are at at length very often sufferers by it; some are seized with sudden bleedings from the lungs or from the nostrils; and others attacked with violent coughs, ending in consumptions.'

In this instance, however, the action of the tea is probably mechanical, like that of flour or stone-dust.—The noxious effects of tea are probably over-rated: that it is a narcotic, we cannot doubt: but it is not difficult to suppose that the constitution becomes so habituated to its action as to bear it without injury, when we consider how little evil arises from the use of a much stronger narcotic—Tobacco. **Fer.**

MEDICAL, &c.

Art. 21. *A Treatise on the Bath Waters.* By George Smith Gibbes, M. D. 8vo. pp. 71. 3s. Robinsons. 1800.

This work contains a chemical analysis of the Bath Waters, written with neatness and perspicuity. Dr. Gibbes points out two circumstances, to which attention has not yet been paid, respecting the effects of their external use; viz. the peculiar atmosphere of the Baths, and the power of the siliceous earth contained in the waters.

'From the foregoing experiments I am led to believe that the Bath Waters contain some very active principles; besides their heat, which most assuredly increases the action of their other component parts, we find that they lower the purity of the air, by the quantity of azotic gas which is poured forth into the atmosphere over the Bath.

Bath. Large quantities of this air must be inspired by those who use the open Bath; and as we know that an alteration in the proportions of the component parts of atmospheric air, will produce evident effects on the human constitution, this circumstance may I think be pointed out with propriety as a source of medical inquiry. I have been informed by a very learned and scientific person, that siliceous earth has been found to produce, when dissolved in water, some very considerable effects on the animal economy.

'As my experiments lead me to believe, that this earth forms a large proportion of the solid contents of these waters, as it appears to be very minutely divided, and as the high temperature may give it activity, I think this circumstance also may be regarded as worthy the attention of medical practitioners.'

The general result of the experiments is thus given:

'1. The temperature at a medium in the King's-Bath 114°, in the Hot-Bath a little above that of the King's Bath, and in the Cross-Bath, about 96°.

'2. In the water, carbonic acid gas and azotic gas in very small quantities. The carbonic acid sursaturates the carbonate of lime which is evolved by boiling. The following aeriform fluids escape from the springs through the water, and appear in bubbles on the surface:

a.—Azotic gas -	,80.
b.—Carbonic acid gas	,15.
c.—Oxygen gas -	,05.

'3. Iron in a state of extreme division, the quantities in consequence of its apparent volatility not to be estimated. According to some writers, the King's-Bath contains the largest portion.

'4. Sulphate of lime or selenite in the proportion of ,40 of the solid residuum.

'5. Supersaturated carbonate of lime ,20.

'6. Silex ,15.

'7. Alum, or sulphate of alumine ,05.

'8. Common salt and sulphate of soda ,20.

'The solid matter forms about a 660th part of these waters.

'The sand which is thrown up by these springs is composed of silex, selenite, carbonate of lime, some sulphur, and some particles of iron which have been found to be attracted by the magnet.'

A second part of this performance is announced, which will contain an account of the medical properties of these waters. **Fer.**

Art. 22. *A candid Inquiry into the Education, Qualifications, and Offices of a Surgeon-Apothecary;* the several Branches of the Profession being distinctly treated on, and suitable Methodical Forms annexed; besides, various other Topics connected with the principal Offices are also subjoined. By Mr. James Lucas, late a Surgeon of the Leeds Infirmary, &c. 12mo. pp. 340. 5s. Boards. Cadell jun. and Davies. 1800.

This is a sensible tract, and contains many observations which may be advantageously perused by students and young practitioners. The author

author writes like a man of just and liberal notions; and it certainly is of great moment to the public, that the numerous body of men, whose qualifications he appreciates, should be as well educated as Mr. Lucas requires, and should act on as candid and generous principles as those which he inculcates. A weighty trust is reposed in their hands; to be responsible for which, uncommon acquirements and attention are necessary. **Fer.**

Art. 23. *An Essay on Phlegmatia Dolens*, including an Account of the Symptoms, Causes, and Cure of *Peritonitis Puerperalis & Conjunctiva*, &c. &c. By John Hull, M. D. 8vo. pp. 368. 6s. 6d. Boards. Bickerstaff. 1800.

The disease termed *Phlegmatia Dolens* is a swelling of one or both of the lower extremities, which sometimes happens during the Puerperal State, and which has been described by many authors. The present writer supposes it to depend on an inflammatory affection of the muscles, cellular membrane, and inferior surface of the cutis; suddenly producing an effusion of serum and coagulating lymph from the exhalents, into the cellular membrane of the limb. The method of cure, which he proposes, consists in general evacuations, sedatives, and warm bathing; and, as topical applications, leeches, poultices, and fomentations are recommended. Several cases of the disease are given; and this verbose production also abounds with very long extracts from different writers. So little of the volume consists of the author's own remarks, that it would have appeared to more advantage if it had been considerably abridged; especially when we consider that Dr. Hull's theory of the disease is unsatisfactory, and that he has thrown little light on the method of cure. **Do**

Art. 24. *Medicinæ Praxeos Compendium*, &c. *Auctore E. G. Clarke, M. D. Editio Secunda, Plurimum aucta et emendata.* 12mo. 5s. sewed. Johnson, &c. 1800.

We have formerly noticed the first edition of Dr. Clarke's Abstract. (See Rev. vol. xxix. N. S. p. 456.) Of the present, we can only say that it is somewhat enlarged: the character of the work, in course, remains the same. **Do**

Art. 25. *The Physician's Portable Library*, or Compendium of the Modern Practice of Physic. In which the Causes, Symptoms, and Treatment of all the Diseases incident to the Human Body are clearly and fully delivered; together with the Virtues, Doses, and proper Exhibition of all the Medicinal Simples and Compositions directed in the last London and Edinburgh Pharmacopœias. To which are added, Tables of the new Names adopted by each College, and of their Reference to those formerly in Use. By Brabazon Smith, M. D. 12mo. 5s. Boards. Matthews. 1806.

This small work contains a short account of the principal diseases for which physicians are generally consulted: but we fear that it is too brief to be of much service, excepting to *very* young beginners. Most of the articles do not greatly exceed the length of the title-page, and we shall follow the author's example in our criticism. **Do**

Art. 26. *Oratio in Theatro Collegii Regalis Medicorum Londinensis, ex Harveii Instituto, habita Die Octob.* 18°, *An.* 1800, *ab* Henrico Vaughan, M.D. *Medico Regio Extraordinario* 4to. White. 1800.

This elegant oration pleads a cause which, we hope, will never want powerful advocates among the faculty,—the utility of combining an attention to general literature with medical pursuits. It is by this union only, that an insuperable barrier can be placed between the philosophical Physician and the presumptuous Empiric; especially at this period, when dogmatism is declining in consideration with the great body of the profession.

The latinity of this discourse is pure, and several phrases are happily turned. With the sentiments which it contains, we entirely accord.

Fer.

Art. 27. *Observations on the Diseases which prevailed on board a Part of his Majesty's Squadron*, on the Leeward Island Station, between Nov. 1794, and April 1796. By Leonard Gillespie, M.D. Surgeon and Agent to the Naval Hospital at Fort-Royal, Martinique. 8vo. pp. 240. 5s. Boards. Cuthell. 1800.

We meet with little that is either new or striking, in this publication. The author writes like a man of observation, but the subject of West-India diseases seems to be nearly exhausted.—Dr. G. thinks that persons infected with the itch are less liable to febrile contagion than others: this, if it be well-founded, is a curious remark. He is a decided enemy to the copious use of mercury in the yellow fever, which has been so warmly recommended by several late writers; and he also condemns bleeding, emetics, and all active purgatives. His method of cure consisted in the frequent injection of glysters, shaving the head, bathing the patient repeatedly during the day in fresh lime-juice, and applying slices of limes to the forehead and other parts. The tepid bath was of much service, on the first remission of the fever. Internally, diluents, and opiates were used. Blisters, and the exhibition of Peruvian bark, were efficacious, when employed on the first remission of the fever. Stimulants were likewise advantageous, in this stage.—The remaining observations contained in this volume are of so miscellaneous a nature, that we cannot pretend to offer an analysis of them: but the work may be perused with advantage by West-India practitioners.

D.°

MILITARY *and* NAVAL AFFAIRS.

Art. 28. *An authentic Narrative of the Proceedings of his Majesty's Squadron under the Command of Rear-Admiral Sir James Saumarez, Bart. K.B.* from the Period of its sailing from Plymouth to the Conclusion of the Action with the Combined Fleets. By an Officer of the Squadron. 8vo. 1s. Egerton.

The readers of this narrative would have had more complete reliance on its *authenticity*, if the name of the writer had been prefixed: but a perusal of it inclines us to believe its testimony. With respect to the action with Rear-Admiral Linois' squadron and the Spanish batteries at Algeziras, on the 6th of July 1801, it decidedly appears from

from this as from former accounts, that its unfavourable termination on our side was entirely owing to those failures of the wind which are so frequent in the Mediterranean, and to the operation of the currents; and that the capture of the Hannibal was caused by her unfortunately taking the ground. Indeed, the subsequent most honorable acquittal of Captain Ferris and the other Officers of that ship, by a court martial, not only proclaimed that no blame attached to them, but that the highest credit was due to their intrepidity and perseverance.

The exertions of the squadron in refitting, and its conduct in the action with the French and Spanish off Cadiz on the 13th July, merit the utmost praise; and the judgment of Sir James Saumarez, in chusing night for his combat with a force *above double his own*, was fully evinced by the consequences. Two Spanish first-rates took fire in the confusion, and blew up; the San Antonio, of 74 guns, was captured by the Superb (in retaliation for the loss of the Hannibal); and the French ship the *Formidable*, of 84 guns, would have been a prize to the Venerable, had not the latter struck on a rock, and lost her masts.

The consequences of this discomfiture of the enemy are thus stated by the writer of the narrative, and have not hitherto, perhaps, been sufficiently appreciated:

'It is now ascertained that the division under Mons. Linois, with the troops on board his ships, were destined to take possession of the batteries at the mouth of the Tagus, and to seize the large fleet of British merchantmen that were in that river, and co-operate with the French army on the Portuguese frontiers in the capture of Lisbon itself.—Not only the commercial interest was, therefore, preserved from an immense loss, but the kingdom of Portugal itself may be said, in a considerable degree, to owe its present security to the defeat of this expedition.' G. 2.

Art. 29. *Narrative founded on a Series of Events which took place in the Island of St. Marcou.* By James Gomm, Esq. late Lieutenant and Commander of the Tickler Gun-vessel. 8vo. 1s. Steele. 1801.

It appears from this relation that Mr. Gomm, and the Lieutenants of two other gun-vessels, were superseded in their respective commands, in consequence of their conduct on occasion of some mutinous behaviour among the seamen, in July 1795: for which conduct, says Mr. G. 'instead of accusation, I felt that I ought to look for approbation.'—It is neither our duty nor in our power to give any judgment in this case: but, speaking merely from the present statement, Mr. Gomm's lot seems to have been rather hard. Do

Art. 30. *Observations on the Establishment of a Royal Military College*, for the Instruction of the Officers of the British Army, as proposed by the Secretary at War. 8vo. 1s. 6d. Egerton.

The writer of this pamphlet congratulates the army on the establishment of a public Military College, the foundations of which have ately been laid in the neighbourhood of Chelsea; because, he says,

'It has long been a subject of the deepest regret, that the officers of the British army have had no proper seminary in their own country, to which they might resort, in order to obtain a competent knowlege of the scientific part of the Military Profession. Whoever, therefore, aspired to honourable distinction in our service, was obliged to seek upon the Continent of Europe, for that instruction in the elementary principles as well as in the higher branches of Military Science, which he could not procure at home.'

In consequence of this difficulty, and of a reliance on the native energy and usual success of British troops, 'scientific knowlege (says this writer) has not been cultivated by military men in general;—and therefore it is not surprizing that in the attack and defence of fortified places, the officers of the British army have seldom displayed much military science.' To make our army equal to any in the world, what, then, is wanting? '*The union of science with courage, and tactics with discipline.*' For the attainment of this object, therefore, the new Institution is viewed with much satisfaction; and several regulations in the conduct of it are proposed.

The practice of purchasing and selling Commissions is here particularly reprobated as destructive, in various ways, of the improvement of the British army; and the opposite customs of the Navy are justly praised, as obviously tending to that superiority of our naval over our military operations, which is generally acknowleged. The author anticipates, but despises, the objection to the abolition of the purchase of Commissions, that it would prevent the nobility and men of large fortune from entering the army; and indeed we do not see why it should have such an effect, *to any prejudicial degree*, in the land service, any more than the non-existence of such a practice has in the navy.—In carrying the proposed abolition into effect, the necessary recompenses to those officers who have already purchased are then suggested: together with some rules to be observed in future promotions.

Various other remarks on the state of the army are added, relative to an increase of the Rifle corps, a diminution of length and weight in the arms of the light infantry, a reduction of the heavy dragoons, (as being very seldom of any material service,) the supply of clothing for regiments being in the hands of Government instead of those of the Colonels, the mode of firing and the position of officers in action, &c. The writer also suggests the restoration of the use of *armour*, so far at least as to protect the *heart*; and the institution of a new order of Military Knighthood. He likewise announces his intention of publishing some Observations on Field Fortification and Castrametation, and another work intitled Miscellaneous Tactical Disquisitions.

We give no opinion respecting the eligibility of these various propositions, but we recommend them to consideration. The restrictions lately imposed by the Duke of York on the rapid purchase of progressive commissions, and the Institution of the New Military College, may partly fulfil the design of some of them.

POETRY.

Art. 31. *Peace*, a Poem; inscribed to the Right Hon. Henry Addington. By Thomas Dermody. 4to. 1s. 6d. Hatchard. 1801.

Transported by the delightful prospect of peace, and by fond anticipation of all its attendant blessings, the author of this poem indulges his enraptured Muse with a profusion of poetic and *prophetic* embellishments. Were we to attempt to criticize this hasty effusion of patriotic enthusiasm, a similarity of *feeling* on this subject would soon induce us to drop the pen of censure; and we should ill succeed in offering so much violence to the good humour into which we have been thrown, by this happy and almost unexpected turn in our public affairs.—On this topic, then, Sing on, ye Sons of Melody and Rhime, without restraint or apprehension: for we can truly say, with the sweet Bard of Twickenham, that

"PEACE is our dear delight;—not Fleury's more."

Art. 32. *Ocean:* a Poem, in Two Parts. By Mason Chamberlin, Author of *Equanimity*, a Poem. 8vo. 1s. 6d. Clarke.

To a British bard, the subject chosen by this author may be supposed to communicate a kind of inspiration. If, however, we cannot compliment Mr. C. as manifesting the fervid glow of poetic sentiment, we can allow him the merit of being pious and patriotic. Here, as in his poem intitled *Equanimity*, (see M. R. vol. xxxiii. N. S. p. 429.) he interweaves passages of scripture in his verse: but this practice excites the idea of a deficiency of invention, and produces a prosaic effect; as in this line,

'Whom no man living ever yet hath seen.'

It is still more material to remark that the 137 lines, which form the introduction, are irrelevant to the subject proposed; and that, however desirous the author may be to appreciate the respective merits of Thomson and Bloomfield, in the line of pastoral poetry, such a comparison is out of place here. The poem would be more homogeneous, if it were to begin with this passage; which is, indeed, no unfavourable specimen of Mr. C.'s powers:

'Ocean! to thee I dedicate my strain,
Thou "secret world of wonders in thyself,"
(As sung the bard, whose praises ever break
Spontaneous from my lips); for thou, indeed,
Art inexhaustibly an object form'd
For Britons to admire, who yet retain
(Under the auspices of Heav'n's high will)
Their rank among the nations by thine aid.
As each new æra adds to the renown
Of our unrivall'd navy; as it still
Majestic o'er thy whit'ning surges rides,
Here ever fresh the subject of our song!
While youthful heroes emulously strive
To follow where their chieftains lead the way.'

Mr. C. introduces a morning view of the sea after a stormy night — vessels putting to sea — moonlight scene—light-house — reflections founded on the analogy between natural and moral objects—homeward-bound fleet—tales of Sophia and Henry—of Louisa and Edward.

The second part contains the fisherman's return—winter morning after a storm—addresses to Sir E. Pellew and Sir R. Curtis—noon-day view of the ocean—calm—rising breeze—storm—thunder and lightning, and the fall of a cliff by an electric stroke—reflections on the Divine Power; and with an address to God, of which the following extract is a part, the poem concludes:

'And as the morn with fairer lustre shines
After the horrors of the stormy night,
While ocean kindles with its chearing beams;
So let tranquillity and mutual love
Bless our united isles; while party rage,
By Truth's mild influence dispers'd, shall yield
Its yet contested reign, as gloomy clouds
Before thy penetrating sun retreat.
'Distinguish'd thus may Britain long remain,
'Till wars shall end, and all mankind obey
The sov'reign law of universal peace.'

Moo-y.

Art. 33. *Crim. Con.* To the Marquis of Blandford. 4to. 2s. 6d. Jordan, &c. 1801.

A very severe and pointed satire on the prevailing profligacy to which the title alludes; the late instance of which, here particularly reprobated, was noticed in our number for July last, p. 327. Many circumstances and *characters* are related and discussed, not only in this poem, (which is by no means a contemptible performance,) but in the annotations; and in both, the M. of B. makes a distinguished figure.—The reprehender himself, however, seems to deserve *reprehension*, for the ludicrous manner in which he has introduced, in his notes, some names of the highest respectability; and this he has inexcusably done, as it should seem, merely for the pleasure of "speaking evil of dignities." Had he, on the contrary, brought forwards these great names for the sake of contrasting the conduct of such characters with those of the proper objects of his censure, there would have been an additional reason for our approbation of his performance.

Art. 34. *Suspiria Oceani: A Monody on the Death of Richard Earl Howe*, K. G. Admiral of the Fleet, and General of his Majesty's Marine Forces. By Dr. Trotter. 4to. 2s. Hatchard. 1800.

A poem written to convey encomiums so well merited as those which are here bestowed, and to mourn the loss of one of the greatest ornaments of our country, who to his distinguished naval talents added the character of an honourable and good man, is not an object for severe criticism.—Dr. Trotter's performance contains some good lines, and others which might have been good if the sense had been more correctly expressed. We give the few following, as a specimen of the versification:

'Bright

' Bright from the main the orient morning spread,
That ne'er must set on many a warrior's head:
Soft in the bellying sails the breezes sleep,
And scarce a fleecy wave deforms the deep;
A flag* unknown to Neptune's wide domain
Shed its faint streamers o'er the azure plain;
There tower'd those banners, dy'd in civic blood,
And claim'd the trident of the humbled flood.
Meanwhile revolving in his manly soul,
Fate's stern decrees, that human might controul,
Britannia's hero bade the signal fly,
And the loud cannon shake the vaulted sky:
Quick thro' the trembling host he darts his course,
And swift as lightning deals the thunder's force.'

If, in the first of these lines, the poet had told us simply that the sun had risen, the next would have followed with some propriety. We must suppose that the author meant the sun, and not the orient morning, ' that ne'er must set,' &c. In the fourth line, the word ' deforms' is not well chosen; nor is ' shed' in the sixth.

Several anecdotes occur in the author's notes, relative to the memorable battle of the 1st of June 1794, which would have been very interesting at a period less distant from that event †, and which will yet be perused with curiosity and satisfaction.

Capt. B....y.

POLITICS.

Art. 35. *Reflections at the Conclusion of the War:* being a Sequel to "Reflections on the Political and Moral State of Society, at the Close of the Eighteenth Century." The Second Edition, with Additions. By John Bowles, Esq. 8vo. 2s. 6d. Rivingtons.

Qualis ab incepto. Mr. Bowles is not guilty of the smallest relaxation of sentiment; his love and his hatred remain the same; and the joyful sound of Peace cannot smooth one wrinkle on his brow. Louis XVIII. has not a more doughty champion, nor republican France a more inveterate enemy, than this writer; who cannot rejoice at the conclusion of the war, since it has failed to procure the re-establishment of the French monarchy. Alarms are also excited respecting the dangers to which we are still exposed from the monster Jacobinism, who is said to be left in the plenitude of power, and to render it impossible for us to return with safety to a peace establishment.—The object of Mr. Bowles seems to be, to prevent our improving the peace in the spirit of peace, and to keep alive an hostile disposition which on the first occasion may break out into a new war. We, however, cannot perceive, even on his own principles, the good policy of this conduct. As the war has failed of accomplishing one of the objects which its advocates had most at heart, viz. the restoration of the Bourbons, is it not wise to try the effect of

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' * The tri-coloured flag; originally intended for the nation, the law, and the king, of the constituting assembly.'

† We are sorry that our notice of the pamphlet itself has been long accidentally delayed.

Peace? Mr. B. maintains the *justice* and *necessity* of the war, and thinks that there can be no safety for us, without the restoration of the French monarchy: but, according to his principle of the *moral sense*, which he says 'never fails to determine in favour of those claims which have the sanction of antiquity, which opposes almost insurmountable difficulties to the establishment of unjust claims to dominion,' and which 'makes usurpation tremble on its throne,' recourse to arms in favour of the Bourbons was completely *unnecessary;* and it would have been more prudent to have given time for the operation of this moral sense on the minds of the French people,—abstaining from all interference, as the states of Europe did at the period of our republican commotions.

We may have been blameable in not having calculated the consequences of failure in the great object of the war: but, be this as it may, since the sword is returned to its scabbard, let us endeavour to convert the peace into a blessing, and refrain from that abuse of the French and of their First Consul, in which Mr. Bowles so inconsiderately indulges himself.

Notwithstanding this writer's objections to the Peace, and though he considers it as *a Peace of necessity*, which has preserved every thing but secured nothing, he by no means admits the sentiment which Mr. Fox is said to have advanced, that *we have gained none of the objects of the war.* On the contrary, he asserts that 'we have gained objects of inestimable value;' that 'we have preserved the British monarchy;' that 'we have raised, to an unexampled pitch of glory, the reputation of our arms by sea and land;' and that 'we have stemmed the torrent of revolutionary and infidel principles.'—'Such (says he) are the objects which we have gained by the war; and *though they may be of no value in the eyes of the Whig Club*, yet in the estimation of the British people, they compensate all the treasures, and they immortalize all the blood, which have been expended in their attainment.'

Mr. Pitt is complimented by Mr. Bowles as the saviour of the thrones of Europe, and Mr. Fox is considered as an enemy to their security. Mooy.

Art. 36. *Observations on the Factions which have ruled Ireland*, on the Calumnies thrown on the People of that Country; and on the Justice, Expediency, and Necessity of restoring to the Catholics their Political Rights. By J. E. Devereux, Esq. The Second Edition. 8vo. 4s. 6d. Richardsons.

All unprejudiced men must acknowlege that Ireland, for a length of time, had much just reason for complaint. From the reign of Henry II. to the present period, she has been treated with harshness and injustice; and the crimes laid to her account are, perhaps, more owing to the severity with which she has been ruled, than to any evil propensities in her own disposition. Indeed, as people are formed in a great measure by the nature of their government, and as it is confessed that for ages Ireland has been miserably governed, it is but fair to consider the irregularities which have disgraced that country, as in some degree the result of our own mismanagement and narrow views. Mr. Devereux has too much reason for asserting that the people

people of that country have been uniformly calumniated; and not contented with merely resisting the calumny, he undertakes to shew that 'they justly merit the esteem of the people of Britain.' As the union has taken place, this is a sentiment which it certainly is politic to encourage.

Mr. D. is an able apologist for the catholics, and a most strenuous advocate for their emancipation. He takes great pains to refute 'all the old fanatical lies, and all the common-place changes which have been rung upon the priesthood and popery;' assuring us that 'the ministers of the catholic worship are, with an impudent grossness, charged with crimes which they abhor.' In fine, he solemnly deprecates the hypocritical tyranny of what he terms the FACTION; and he maintains that, without a complete restoration of catholic rights, it is not at present possible for a British minister, even with the best intentions, to establish a good government in Ireland. This position is supported by much able reasoning: what effect it will produce, time must discover. Moo-y.

Art. 37. *A Review of the Principles on which the Clergy are excluded from sitting in the House of Commons:* with a few cursory Observations on Residence. In a Letter to a Friend. 8vo. 1s. 6d. Reynolds.

This letter is stated to have produced the conviction of the gentleman to whom it was addressed; and we have not the smallest reason for doubting the fact, since it is replete with good sense and sound reasoning. The author considers the late act for *removing doubts*, respecting the ineligibility of the clergy to a seat in the Commons' house of parliament, as having not only disfranchised a large body of men, but as having also narrowed the liberty of every other subject, by restricting his choice to fewer objects. As the wisdom of *past* parliaments is revised by the wisdom of the *present*, in turn that of the *present* may be submitted to the review of that of some *future* parliament; when, it is not impossible, doubts will be entertained respecting the equity and policy of the late act for *removing doubts*. The reasons urged for excluding the clergy from a seat in the Lower House tend also to disqualify them for being justices of the peace, or commissioners of taxes, and should prohibit the Bishops from sitting in the House of Lords. It is now idle to discuss the objection to the admission of the clergy to a seat in the House of Commons, on the ground of their being represented in Convocation: but if this objection, as the present writer observes, were to be brought forwards in its full force, it would apply only to their being admitted into parliament *as a body*, and not to the case of a *clerical individual with a lay qualification*.

We are assured by this gentleman, that it is not for the sake of the clergy that the equity of their claim is here supported; and knowing the purity of our own motives in maintaining the same side of the argument, we can easily believe him. It is not in harmony with the British constitution to decide that a man, when he commences a priest, shall cease to be a citizen. Should it be determined that parliamentary and parochial duty are incompatible, yet there is

no reason in decreeing that a man who was once a priest shall never be a legislator. An act of regulation may be passed, declaring that no person whatever should be competent to serve in the Lower House of parliament, as long as he held any ecclesiastical preferment: but farther than this, we think, the principles of policy and of the constitution may not warrant us to proceed.

To enforce residence, this writer would not employ any harsh and violent measures. He would not expose the non-resident clergy to penalties, which might never be levied: but he would simply assess on every absentee a sum equal to the rate of his benefice in the king's books.—This is certainly a mild remedy: yet there can be no doubt of its producing considerable effect. **Mooy.**

MISCELLANEOUS.

Art. 38. *Essays, selected from Montaigne.* With a Sketch of the Life of the Author. 12mo. 4s. Boards. Cadell jun. and Davies. 1800.

Every person, who is acquainted with the writings of Montaigne, must lament that they contain many passages that are improper for general perusal. The fair sex are almost excluded from participating in the instruction to be derived from his essays, by the great intermixture of indelicacy with some of his most serious subjects. In the publication before us, a lady has rendered the acceptable service of selecting those parts which are unobjectionable, and of offering them in corrected language to the attention of females and young persons. We heartily applaud so proper an undertaking, and wish it all possible success. **Fer.**

Art. 39. *A Father's Instructions;* Part the Third; adapted to different Periods of Life, from Youth to Maturity; and designed to promote the Love of Virtue; a Taste for Knowlege; and attentive Observation of the Works of Nature. By Thomas Percival, M.D. &c. 12mo. pp. 142. 2s. 6d. Johnson. 1800.

It is a frequent subject of complaint, among readers who possess more sensibility than attention, that books which consist of several volumes are seldom supported with equal spirit to the last. In works of mere amusement, the blame of such failures may be fairly divided between the author and his reader; where one nods, the other will naturally sleep: but in moral and didactic performances, we have a right to expect that "the latter end should be like the beginning." We cannot, therefore, observe without regret that the present sequel to a work, which has been formerly noticed with approbation in our Review*, proves very unequal to the expectations which the preceding parts had excited. The *cause* of this deficiency is probably to be found in the melancholy events, recorded by the inscription to the memory of the author's two elder sons; and to the feelings of grief thus originating, we may ascribe the general strain of the book;—which is pious, resigned, and consolatory, but destitute of those comprehensive views of life and manners, which either the practical philosopher or the sagacious man of the world would present to his children, on their entrance on the busy stage of human affairs.

* See M. Rev. vol. liv. p. 184. and vol. lvi. p. 391.

Much,

Much, indeed, of what relates to this important period of female existence, has been anticipated in Dr. Gregory's Legacy to his Daughters; and much of the instruction most salutary to young men, on their introduction to life, has been delivered by Dr. Fordyce. Yet there are many important changes of manners, in these days of innovation, which would afford ample scope for the exertions of a skilful observer.

We lament, therefore, that a great part of this Supplement to Dr. Percival's Instructions has been devoted to the discussion of abstract questions, which have already been sufficiently debated. The *origin of evil*, for example, occupies a space of nearly fifty pages out of 142, in this volume; and the view, which the Doctor has taken of this intricate question, differs very little from that which Pope has given in the Essay on Man:

> "All nature is but art, unknown to thee,
> All chance, direction, which thou canst not see;
> All discord, harmony not understood,
> All partial evil, universal good."

Dr. P. has merely enlarged on these topics, without attempting a philosophical solution of the difficulty.—The remaining part of the volume contains Miscellaneous Communications to a Young Clergyman, (the Doctor's eldest son) selected from private correspondence. These papers are creditable to the author, as they evince paternal affection and solicitude, but they contain nothing superior to the general scope and merit of sermons.

Perhaps we have been rendered more sensible to the limited nature of this publication, in consequence of having lately passed under review the letters of Dr. Aikin to his Son. After having perused a work so comprehensive in its objects, interspersed with applications of general philosophy to the particular incidents of life, and distinguished by ease and perspicuity of language, we may be less disposed to relish discourses which appear to be calculated rather for the pulpit than for a family-circle, or for the perusal of literary men.

Our readers will not expect more particular criticisms on the contents of this volume, after the preceding remarks. **Fer.**

Art. 40. *Information for Cottagers*, collected from the Reports of the Society for bettering the Condition and increasing the Comforts of the Poor; and published by Order of the Society. 12mo. 6d. Hatchard.

Since we must "have the Poor always with us," it is a matter of the soundest policy, as well as a principle of our religion, to consult their comfort. If they be fairly used as valuable members of the community, we shall have little reason for considering them as burdens on it. Let us be more just, and there will be less occasion for our being charitable. Our system of Poor laws requires a most complete revisal; and our conduct towards the Poor themselves ought to be more liberal. They, as well as the Rich, should have as much independance as their humble circumstances will admit: their wages should be equal to their support; and their virtue and usefulness

fulness will depend on the habits of order in their domestic economy. We admire the little publication before us, because it directs the attention of the Public to the Cottage, and is calculated for the Cottager. How much is it to be lamented that country-gentlemen have considered a large Poor-House, or House of Industry, as preferable to a village of decent cottages; and that the Poor, from a mistaken notion of their being better managed and more cheaply fed by the Parish, have been forced from under their lowly roofs to take refuge in these vast Monasteries of Indigence! By the enormous increase of the Poor-rates, the Public begin to be awakened to a sense of the error of the old system; and it may be presumed, since Parliament will now have leisure for the discussion, that the state of the Poor will undergo a minute inquiry. Should this be the case, we hope that the labours of the Society with which this little work originates will not be disregarded.—While the Nation at large is invited to weigh the superior advantages of the Cottage system, suitable advice is here given to the cottage-inhabitant; with a paper on the comforts of the poor, golden rules for their instruction, and several very useful receipts for stewing, for making beer and bread, for preparing rice, &c. &c. Mooy.

Art. 41. *Observations on Friendly Societies*, for the Maintenance of the Industrious Classes, during Sickness, Infirmity, Old Age, and other Exigencies. By Sir Frederick Morton Eden, Bart. 8vo. 1s. White. 1801.

Of all plans for extending relief to the sick and suffering Poor, that of Friendly Societies has been thought to be least exceptionable; and it is benevolent to consider its advantages and present defects, in order that this system may be brought to as much perfection as is possible; that the Poor in every place may be induced to form Institutions of this kind; and that, finding themselves adequate with prudence and forethought to their own support, they may avoid the miserable idea of dying in a work-house:—the desirable consequence of which would be that the Public might be exonerated from those *bounties on idleness*, (as Dr. Franklin called them,) *the Poor-rates*.

We are entirely of opinion, with this humane and judicious Baronet, that 'Contagion, moral as well as physical, is frequently the result of multitudinous assemblies;' and therefore we have expressed ourselves partial to those plans which enable the Poor to live apart, rather than to those which congregate them. Friendly Societies, as consonant with the system of Individuality, merit encouragement. Sir F. M. Eden reckons the aggregate number of these clubs in England and Wales at 7200; which, on an average of 90 members for each club, makes a total of 648,000 persons united, throughout the kingdom, in Friendly Societies. Wishing to promote the cause of the Poor, he discusses the present imperfections of these associations; and he advises that there be formed a *National Institution*, or *Insurance Office*, from which the industrious classes might, on just and equitable principles, secure a provision against the various exigencies to which they are exposed. Such an establishment, he thinks, would render Friendly Societies more popular, and their advantages less equivocal.

A Benefit Society on a very simple principle, says the Baronet, is established

established in the county of Ayr in Scotland. It consists of about 50 members, and is called the Penny or Halfpenny Society. It has no funds which can be embezzled: but, when a brother is confined to his bed by sickness, every member pays him a penny weekly; and if he should be able to go out, but not to work, a halfpenny. We admire the simplicity of this plan, and deem it intitled to consideration. **Moo-y.**

Art. 42. *Another Essence of Malone*, or the Beauties of Shakspeare's Editor. Second Part. 8vo. pp. 190. 5s. Becket. 1801.

We have already had occasion to notice two publications of this author, to each of which he had given the appellation of 'The *Essence* of Malone.'—Is he not aware that, if he continues his productions, (no difficult task, when we consider the manner in which they are executed,) he should change his title, and christen them the *Substance* of Malone?—Pope says

> "There are whom Heav'n has blest with store of wit,
> Yet want as much again to manage it"—

a couplet which he afterward exchanged for the following;

> "Some, to whom Heav'n in wit has been profuse,
> Want as much more to turn it to its use."—

This censure of the Poet is not deserved by Mr. Hardinge; he is not so reprehensible for the use to which he has turned his wit, as for the absence of that quality; for it must be allowed, in the language of Butler, that

> "He was very shy of using it."

We observed, in our former article, that this critic discovered more instances of ill-will towards the object of his attack, than either ability or judgment; a sentence which, in the present instance, is still more decidedly merited. If Mr. Malone be not censurable for his productions, we certainly are to be pitied for their consequences, when they introduce such a race of

> "Unfinish'd things, one knows not what to call,
> Their generation's so equivocal."—

S.R.

Art. 43. *New Joe Miller;* or, *the Tickler*. Containing near two thousand good Things, many of which are original, and the others selected from the best Authors. Vol. II. 12mo. 3s. sewed. Ridgway. 1801.

Mr. James Bannantine here avows himself to be the editor of this volume, as well as of its precursor, which we mentioned in our Number for April last; and he says that, notwithstanding the arbitrary remark that the Scotch are deficient in wit, he has thus 'ventured on the task of compiling and circulating *his own wit* and that of others,' though he had 'the misfortune to be born beyond the Tweed.'—We should certainly dispute this national reflection, on general grounds, and we think that Mr. B. affords an individual proof of its falsity: but the nature of many of the *good things* here recorded, both his own compositions and those of others, requires us again to remind him that mere *indecency* is not *wit*, and that even sterling wit is lamentably depreciated by the mixture of obscenity. He endeavours to repel any supposed

supposed objections against the *trifling* quality of his work, by asserting the beneficial tendency of any publication that promotes 'innocent mirth:' we agree in his idea: but we cannot deem that mirth *innocent* which would put modesty to the blush, and encourage ideas which contaminate the mind. We observed that jests and epigrams of this description were too frequent in Mr. B.'s former volume; and both this remark, and the general character which we gave of that compilation, are equally applicable in the present instance.

We shall copy, for our Christmas readers, one or two of those jokes that may *tickle* without *wounding*:

'When a Jew, who was condemned to be hanged, was brought to the gallows, and just on the point of being turned off, a reprieve arrived: when Moses was informed of this, it was expected he would have instantly quitted the cart, but he staid to see his two fellow-travellers hanged, and when asked, why he did not get about his business, said, "*He waited to see if he could bargain with Maisther Ketch for the two gentlement's clothes.*"—

'*Epigram.*

'Tom prais'd his friend, who chang'd his state,
For binding fast himself and Kate
In union so divine:
"Wedlock's *the end of life*," he cried:
"Too true, alas!" said Jack, and sigh'd—
"*'T'will be the end of mine!*"

'A man sitting one evening at an alehouse, thinking how to get provision for the next day, saw a fellow dead drunk upon the opposite bench. "Do you not wish to get rid of this sot?" said he to the landlord. "I do, and half a crown shall speak my thanks," was the reply. "Agreed," said the other; "get me a sack." A sack was procured, and put over the drunken guest. Away trudged the man with his burden, till he came to the house of a noted resurrectionist, at whose door he knocked. "Who's there?" said a voice from within. "I have brought you *a subject*," replied the man: "so come, quick, give me my fee." The money was immediately paid, and the sack, with its contents, deposited in the surgery. The motion of quick walking had nearly recovered the poor victim, who, before the other was gone five minutes, endeavoured to extricate himself from the sack. The purchaser, enraged at being thus outwitted, ran after the man who had deceived him, collared him, and cried out, "Why, you dog, the man's alive."—"Alive!" answered the other; "so much the better; *kill him when you want him.*"—

'Lord Mansfield, being one time upon the home circuit, a man was brought before him charged with stealing a silver ladle, and, in the course of the evidence, the counsel for the crown was rather severe upon the prisoner for being an attorney. "Come, come," said his Lordship in a whisper to the counsellor, "don't exaggerate matters. If the fellow had been an attorney, you may depend upon it he would have stolen the bowl as well as the ladle."—

The following Epigram is so well founded, that we could not object to its *point*, even if it were more likely to *scratch*:

'*Innocence.*

'*Innocence.*

'If Eve in her innocence could not be blam'd
Because going naked she was not asham'd;
Whosoe'er views the ladies, as ladies now dress,
That again they grow innocent sure will confess;
And that artfully too they retaliate the evil:
By the devil once tempted, they now *tempt the devil.*'

A number of political squibs in this volume proclaim the editor a warm anti-ministerialist;—equally an anti-Pittite, and an anti-Addingtonian. What would this Gentleman have? Perhaps he would hope to be prime minister himself, if a merry Charles II. now filled the throne.

G.2.

SINGLE SERMONS.

Art. 44. *The unjustifiableness of Cruelty to the Brute Creation*, and the Obligations we are under to treat it with Lenity and Compassion. 8vo. 1s. Seeley. 1801.

If this sermon has never been preached, we see no reason why it should not; for while we may find one which is superior, we are doomed to read fifty that are not so good. Indeed, it has given us so much real pleasure, as being completely in unison with our sentiments and feelings, that we request the writer to accept of our warmest thanks for his humane effort in behalf of the Brute Creation. We admire his eloquence in favour of the poor Ass; (an animal whom not even superstition has been able to befriend;) and we think that he might also have *opened his mouth* (text Prov. xxxi. 8.) for the timid hare: but, being himself, perhaps, partial to hunting, he has only contemplated the pleasures of the *pursuing* and not the misery of the *pursued* animals. The importance of checking the mischievous and cruel dispositions of children is properly maintained. May the representation produce a good effect!—In the following short address to sensibility, we discern the traits of an amiable mind:

'O SENSIBILITY! thou that art justly so called; may thy endearing name never be prostituted to a purpose so contrary to thy nature, as the wilfully, and at the same time unnecessarily afflicting any of God's creatures! May thy benign influence be diffused through the whole human race! May it add a gentleness to manly strength and vigour, uniting in a firmness of mind, ever prepared to aid and protect the weaker and more defenceless part of our own species, and scorning cowardly to trample on the lowest classes in the scale of animated beings!'

The author does not strenuously urge the doctrine of the "future existence" of brutes; nor does he incline to the Gentoo principle: he wishes us, however, to regard mercy towards them as a duty, and "*till we end the Being, make it blest.*"

Mooy.

Art. 45. *The Unity of Wisdom and Integrity recommended:* delivered at Bridport, Dorsetshire, July 1, 1801, before the Society of Unitarian Christians, established in the West of England, for promoting Christian Knowlege and the Practice of Virtue by the Distribution of Books. By John Prior Estlin. 12mo. 1s. Johnson.

Mr.

Mr. Estlin appears to be a sensible, ingenuous, and amiable man; and his present discourse must give him credit even with those who may not admire his principles. He neatly explains what is meant by having the wisdom of the serpent combined with the harmlessness of the dove, (the text, Matth. x. 16.) and exhorts his hearers to be 'ardent without bigotry, honest without weakness, wise without craft, prudent without selfishness, and steady without obstinacy.' To a manly avowal of his belief in the Unity of God and the Humanity of Christ, he adds the mental process by which, though educated in different sentiments, he arrived at this conviction. Many Christians will probably be dissatisfied with Mr. E.'s explanations of those passages, which are commonly adduced as evidences of the pre-existence: but they cannot question his religious integrity, nor his piety,—though they should join with us in objecting to his description of the Deity as '*the great master of the Drama.*'

Moo-y.

Art. 46. Delivered in the Parish Church of Wimbledon, Surrey, before the Wimbledon Volunteer Cavalry and Infantry, Sept. 28, 1800. To which is added an Appendix, containing the Nature of the Engagements to which the Members of Volunteer Corps pledge themselves at the Time of their Association. By S. Hodson, M. B. Rector of Thrapston in Northamptonshire. 8vo. 1s. Hatchard.

By recounting the series of our national blessings, Mr. H. exhorted his audience to religious gratitude; and by describing the nature of the danger with which we were threatened at the time of the delivery of this sermon, he endeavoured to awaken them to proper unanimity and exertion. His reflections are suited to the occasion; and, in the Appendix, he has concisely delineated the duty of Volunteer associators.

Do

CORRESPONDENCE.

Mr. Burdon's letter has reached us, but we never saw the publication to which it refers, and of which it is now almost too late to take notice, with propriety.

Mr. Ashdowne will probably derive some satisfaction, on the point of his inquiry, from the VIIIth Article of this Number. Respecting the particular work which he mentions, we cannot give him any information.

We have received a letter from Mr. Pearson, of Rempstone, but it came too late for farther notice at present.

The letter signed *Corvinus*, and others, are under the same circumstances.

☞ The APPENDIX to Vol. XXXVI. of the MONTHLY REVIEW will be published with the Number for January, as usual; and will contain a variety of articles of FOREIGN LITERATURE, with the General Title, &c. for that Volume.

P. 413. l. 27. read, and it is communicated, &c

APPENDIX

TO THE

THIRTY-SIXTH VOLUME

OF THE

MONTHLY REVIEW

ENLARGED.

FOREIGN LITERATURE.

ART. I. *Voyage dans la Haute Pennsylvanie*, &c.; *i. e.* Travels in Upper Pennsylvania and in the State of New York, by an adopted Member of the Oneida Nation. Translated and published by the Author of the *Letters of an American Farmer*. 3 Vols. 8vo. Paris. 1801. Imported by De Boffe, London. Price 1l. 4s. sewed.

THE numerous accounts of the provinces of North America, which have been published by European travellers, within a few years, exemplify the truth of the assertion that these States afford a field for description which cannot easily be exhausted. The work before us might with some propriety have been intitled, *Tableau des Etats Unis*; since, in addition to the route announced in the title-page, accounts of most of the other provinces are introduced either in the way of travels, or as communications received. It is, in fact, a collection of information drawn from various sources, to which M. DE CREVECOEUR has given the semblance of a translation from an English manuscript, said to have been found among the wreck of a vessel from Philadelphia bound to Denmark. The MS. is represented to have suffered injury, and to be incomplete: occasionally therefore, and not inconveniently, chasms are suffered to appear.

In the commencement, we find an essay on the characters of the native tribes of that part of America which is now under the dominion of the United States; including a general view of their condition from the earliest settlement of the Europeans

to the present time. With an examination of this Essay, therefore, we shall begin our remarks. It is given as part of a discourse delivered in 1785, by Col. Crawghan, who was employed during several years by the English government in the department for Indian affairs. He remarks on the great uniformity of character which is found to exist among all the nations of this part of the continent, notwithstanding distance of situation, difference of climate, and variation of language. Speaking of the rapid and continual decrease in their numbers, with the total disappearance of entire tribes, he says:

'The nations of the great lakes and of the Ohio, though they cultivate their lands more than the other tribes, and inhabit one of the most fertile regions of the Continent, have become dependant on the Europeans from their avidity to possess European merchandise. Exposed equally with the other nations to the ravages of the small-pox, and to the pernicious use of spirituous liquors, they approach with astonishing speed towards annihilation. It seems as if they were destined to disappear before the ascendancy of the Whites. Yet a few lustres, and there will remain no other traces of their passage over the earth, than the names formerly given by their ancestors to the rivers, the mountains, and the lakes of their country.'

In describing the obstinate adherence of so many tribes to a wandering and precarious mode of life, in defiance of all experience, the Colonel is represented to have adopted the idea that the native Americans are beings of an inferior order to Europeans: 'their constant aversion to labour (he says) and to a settled life, their improvidence, their habitual want of reflection, all seem to prove a defect in the measure of their intelligence; and are they not to be considered as insurmountable obstacles, which invariably oppose, and ever will oppose, their progress towards a better state?' After having enumerated instances of their insensibility to improvement, he adds:

'These circumstances evince that their intelligence is less capable of perfectibility than ours.—During the space of one hundred and seventy years that we have known these people, has there been seen among them a single individual who has shewn a spark of that celestial fire which gives birth to useful ideas and grand conceptions? No: their commerce with us, though it has diminished their wars, their habits of vengeance, and their *cannibalism*, has not communicated to them a taste for new pursuits; they are not yet sensible of the advantages which result from the exclusive possession and cultivation of a field; they conceive not the pleasure of planting a tree, nor the yet greater satisfaction of seeing it grow, and bring forth flowers or fruits; neither do they understand that instinctive attachment which is felt by all other people for the place of their birth: like the beasts of the forest, they quit it without regret, to erect elsewhere their temporary wigwams.'

Much

Much of this censure is certainly dictated by prejudice and fancy; and it is also inconsistent with the details given in the sequel. While a country is so thinly inhabited as to allow room for great choice of situations convenient for subsistence, a wandering life seems most natural. When a piece of land is impoverished, or forsaken by game, another presents itself. Few among the native Americans can have knowlege or even a thought of the place at which they first saw the light: but their removals, it is well known, do not preclude attachment to their *country;* strong instances of which are related even in this work.—A wandering mode of life also affords little chance for permanent improvement. When the inhabitants of a country increase, lands become appropriated: what is not occupied is soon subjected to private claims; and the increased difficulty of acquiring a new settlement fixes the inhabitant to his own particular spot. Thence may be dated the commencement of progressive improvement in the modes and conveniencies of life; that which one discovers another adopts; and the invention, if worth preserving, becomes general. Then, likewise, foresight and care for the future become indispensable. Few, indeed, of the native Americans have been placed in such circumstances: but those few exemplify the truth of this reasoning. M. DE CREVECOEUR, in his *Lettres d'un Cultivateur Américain*, has given the following account of a settlement of native Americans:

"The posterity of the antient natives live on the Isle of *Capoquidick*, which is divided from Martha's Vineyard only by a small canal. Their forefathers, in their concessions of territory, reserved to themselves this asylum; and a law of the Massachusetts forbids any one to buy these lands, even should the Indians wish to sell. The natives whom I have seen at *Capoquidick* seemed to me entirely European by their decency, their neatness, and their industry. They are in nothing inferior to the other inhabitants. They appear, like them, laborious and religious.—Similar to the Europeans, the young Indians of this isle go frequently to Nantucket to seek employment in the whale fishery. They live in peace, subject to the laws of the country. I have no where seen so much union and good neighbourhood: they seem to have no other ambition than that of maintaining decently their wives and children; and I perceived under their roofs plenty, the conveniencies of life, quietness, and peace. They cultivate their lands with judgement and skill."

This surely is a state of improvement; and very high, if improvement is to be measured on a scale of rational happiness. We shall not argue whether *sparks of celestial fire* are visible in this description: but it is not to be objected against the tribes in the most savage state, that they are destitute of those energies which lead to great good or great evil according as the

are directed. The dialogues, which the author has introduced in the course of the work, exhibit no symptoms of weakness of intellect; on the contrary, they manifest such adroitness and force of expression, as only a small portion of human beings can display even in the most improved nations.

It is proper here to advertise the reader that a large, and the most entertaining, part of this publication is occupied by descriptions and details concerning the native Americans; and we imagine that we shall not displease, if to this subject we principally direct our attention,—especially as much of the information on other topics, here collected, has appeared in travels of a later date.

Having so far entered into the discussion of the character of the American Indians, we shall make an extract from Colden's *History of the five Indian Nations;* which affords proof both of their capacity, and their readiness to profit by instruction and advice, when convinced that their benefit is sincerely intended:

"A Missionary was sent by Queen Anne to reside among the Mohawks; she likewise sent furniture for a chapel; the Common Prayer, or at least a considerable part of it was translated into their language and printed: the minister however being naturally a heavy man, had but small success; and his allowance being discontinued on the Queen's death, he left them. Many years past without their having a teacher, when a young man, out of zeal, went voluntarily amongst them. He set up a school to teach the children to read and write their own language, and they made surprising proficiency considering how little their master understood the language. I happened to be in the Mohawk country, and saw several of their performances;—I had lately a letter from him dated December 1641, in which he writes as follows: "Drunkenness was so common, that I doubt whether one grown person of either sex was free from it: very often forty or fifty were drunk at a time. I found they were very fond of keeping me among them, which I made use of to good purpose, threatening them with my departure in case they did not forsake that vice, and frequently requiring a particular promise from them singly; by which means, (through God's blessing) there was a gradual reformation, and I know not that I have seen above ten or twelve persons drunk among them this summer. They have left off divorces, and are legally married. They are constant and devout at church. They have not been known to exercise cruelty to prisoners, and have in a great measure left off going a fighting, which I find the most difficult of all things to dissuade them from." An excellent example this is of what may be effected by the exertions of an individual, who is resolute in the pursuit of good.'

The work of M. DE CREVECOEUR gives credit to the natives for dispositions naturally good, and for manners kind and affectionate in their domestic life. It would be more just, also,

to

to ascribe the small progress which they have made towards civilization, to the strength of their prejudices, than to defect in their intellectual powers. "Why should we do that which our ancestors never did? Were we to cultivate the earth, we should become less courageous. No longer used to the chace, we should not be able to endure hardship, and should shortly forget the use of the tomahawk. For thee, European, return to thine own country, and there cultivate thy small grains. Leave us to live as our ancestors have lived. The sun rises and sets, and the winter succeeds to the summer, as in their time; in Nature, nothing changes: why then should we change?" Such, according to the representations of the present writer, is the language which they hold.—Faint and partial have been the attempts of Europeans to civilize the native Americans: but active and earnest have been their endeavours to corrupt them by presents, to involve them as parties in quarrels in which they had no interest, and to encourage them to the commission of acts of barbarity.

Dreams are considered by the Indians as prognostics meriting serious attention; and it is esteemed a compliment to wish them happy nocturnal visions. The following anecdote appears as having been related to Colonel Crawghan by Sir William Johnson;

'One day, (said Sir William,) *Nissooassou*, an old Mohawk chief, came to me and said, "My father, I dreamt last night that you had given me a fine gold laced scarlet coat, and a laced hat." "Do you speak truth to me?" said I—"Yes, on the word of a Sachem," replied he. "Well then, you shall not have dreamt in vain: I will give you both the one and the other." The next day, having invited him to breakfast, I said to him in my turn, "*Henriques*, I likewise dreamt last night." "What have you dreamt, my father?" demanded he. "I dreamt (said I) that you had given me a little patch of land, called *Acerouni*, on the *Tienaderha*." "How many of thy acres is this little patch of land?" "Ten thousand," answered I.—After some minutes consideration, he said,—"Well, like me you shall not have dreamt in vain; I give you this patch of land: but do not dream again, my father." "And why not, *Henriques*? Are not dreams involuntary?" "Thou dreamest too hard for me," said he, "we should shortly have no land left."

The author has introduced Dr. Franklin, as Governor of Pennsylvania in 1787, giving his opinion on the origin of the North American tribes. Those who inhabit the two Floridas, and the Lower Louisiana, he believes to have come, according to their own traditions, from the mountains of Mexico; and the Esquimaux are supposed, in the speech attributed to the Doctor, to have migrated at a very remote period from the North of Europe. Respecting the other tribes, after several

conjectures, without adopting any, he says that "the warm climates, abounding in the natural fruits of the earth, have necessarily been the cradle of human nature. It is from the bosom of these favoured regions that the exuberant portion of the first societies have insensibly spred themselves over the rest of the earth."—Some of the ideas and expressions here attributed to Dr. Franklin appear to us rather excentric, and tinctured with a levity which is not well suited to a character whose reflections were in general so thoroughly matured.

The first journey described in these volumes is from *Shippenburg*, a small town in the county of Cumberland, to *Onondaga*. It is written in the first person, and is said to have been undertaken by the relator in company with a gentleman from Europe, for the purpose of being present at a grand council, announced in the New York Gazette, which was to be holden there by the chiefs of several Indian tribes. In this journey, and in other travels contained in the present work, it has been the author's principal delight to describe new settlements, and lands in their first state of improvement; with which descriptions, are frequently interwoven the history of the cultivator. The two qualities, which the writer esteems most necessary in a settler, are the love of labour, and a conciliating and neighbourly disposition. In the American Farmer's Letters, M. DE CREVECOEUR has the following remark concerning the diligence and industry of new settlers: "Whence the difference arises, I know not; but, out of twelve families of emigrants of each country, generally seven Scotch will succeed, nine Germans, and four Irish."

Reflections on the charms of solitude, and picturesque descriptions, give to these travels an air of romance. 'Here (says the writer) I enjoy every moment of my life, far from the tumult and agitation of cities, secure from the danger of bankruptcy or fire, and unexposed to those destructive storms which cover the earth with ruin, and fill all hearts with terror and mourning. In other places, time hangs heavy on a man's hands; here I wish to prolong its duration.'—We observe, throughout the volumes, the same disposition towards America, and its inhabitants, which is so strongly expressed in the American Farmer's Letters. Both publications are calculated to encourage emigration from Europe. It is true that the difficulties, which the new settler has to encounter, are represented as formidable: but in no case are they allowed to be insurmountable. Every thing is depicted in a state of progressive and certain improvement, and success is asserted to be the invariable attendant on persevering industry. Such, indeed, must naturally be the result, not only in agricultural

but

but in every useful pursuit: but those who, by reading these seducing descriptions, are tempted to wish for such sylvan happiness, will do well, before they fix on such a mode of life, to seriously examine whether their dispositions and habits are suited to its attainment, or can be fitted for its enjoyment.

The meeting of Indian chiefs at *Onondaga* is represented to have taken place in the year 1789. Not only the manner and formalities observed in holding the council are described, but several of the speeches are given at length, and also portraits of two chiefs who were most conspicuous in the debates. These last, whether copied from real life or only the creations of fancy, are expressive of the characters for which they are intended.

'Seventy-eight persons, Chiefs, old men, and warriors, were seated on their hams round a fire in the middle of a great hall, the sides of which were formed of the trunks of trees, neatly squared. A profound silence preceded the commencement of business. Each with his head inclined forwards, and his eyes fixed on the ground, drew up the smoke from his *oppoygan*, and exhaled it slowly in two uninterrupted columns through his nostrils; which is regarded as a mark of deep meditation. In the first sitting, they appeared without ornament either of paint or of feathers. Here an artist might have found models for fine proportions of the human frame, where the limbs were put in motion by muscles lightly covered with a species of *embonpoint* unknown among white people, which bespoke vigour, firmness, and health. Their heads and physiognomies were of a peculiar cast, such as are to be found only in the forests of the New World. This assemblage of men almost naked, so ferocious in war, so implacable in revenge, so mild and tranquil in their villages, offered a spectacle that was truly a subject for admiration.'

On the second day, the Assembly was more numerous and more brilliant.—We shall present our readers with a sample of Indian oratory, *Kesketomah*, of the *Onondaga* Nation, having recommended a life of peace, and the cultivation of land; that marks should be set up on the boundaries of their territory; and that the introduction of spirituous liquors should be prohibited; reminds the Assembly of a prophecy of *Kooreyhoosta*, (an antient Chief of one of the Canadian nations) that the sowers of grain would extinguish the race of hunters, unless the latter also would determine to cultivate the earth.

"Already (continued the orator,) have the words of *Kooreyhoosta* been verified among the *Pecod*, *Nattick*, *Narraganset*, and many other nations. Behold the country which they occupied; you will not find a living drop of their blood, nor an existing trace of their villages. They are replaced by the habitations of the Whites, whose ploughs ~~now~~ turn up the ground which contains their bones."

'No sooner had *Kesketomah* concluded, than *Koohassen*, a young warrior of the Oneida nation, fiercely arose, with his tomahawk in his hand, "If (said he) I have not sooner spoken, it is because I "respect age, and not from want of matter. We were hunters and "warriors before the arrival of the Whites, and we lived well without stirring the earth about like women. Why cannot we continue "so now? It is the cowardly or the idle only who cannot find "game. Can a man be brave, resolute, and free from care, when "he has cattle and land sown with grain? No: he will be too fond "of life to dare to risk it. If war should happen, can he divide "himself? How can he manage at the same time the tomahawk "and the plough? Those who cultivate the earth pass too much of "their time on their bear-skins, with their women. In living like "the Whites, we should cease to be that which we are, the children "of our God, who has made us hunters and warriors. We should "think and act like them; like them become liars, cheats, dependents, fastened to the soil, chained by laws, governed by papers and "by writings filled with falsehood. With their fields and their "cattle, are the Whites more happy than we are, or do they live "longer than we do? What purpose does the money serve for "which they are always toiling, but to create the difference of rich "and poor, to establish among them crime, malice, and envy? In "becoming cultivators, we must have judges to torment us, and "prisons with high walls to inclose us; hospitality would take flight "I know not whither, and no more return among us; we should do "whatever we were told for money, and no longer have a will of our "own. What is a man who cannot go here or there, smoke, sleep, "or rest himself, at pleasure? It would no longer be strength, "courage, and address which decided the reputation of a man; it "would be money, and a full kettle.—If I lose my independence, "and find myself obliged to submit to the will of another, I shall "retire to the rivers of the west; and shall say to the chiefs of the "nations of the Mississippi, that the Oneidas are become, like the "bearded Whites, *scratchers* of the earth, and vile day-labourers.— "Let us continue to be what we have always been, hunters and "warriors. I hope that my opinion is that of the majority of "those who hear me, whose blood has not been whitened by the "snows of winter, nor chilled by the frosts of age.—I have spoken."

'After a long pause, *Kesketomah* rose for the second time, and said, "Brave, but inconsiderate young man, in whose memory to day is "as yesterday, and to-morrow will be as to day; on whose mind "time and events, in passing, leave no traces, like the arrow which "flies through the air, or the hawk that pursues its prey; who shut "the door against Experience instead of seating him at your fire-"side," &c. He then represented to the Assembly that the greatest evil which the nations had suffered had been in the diminution of their number, and the augmentation of that of the Whites; and he concluded with the following sentence—"I have replied to all with "which the good spirit has inspired *Koohassen*; he also has inspired "me not to reply to that which anger had placed on his tongue.—I "have spoken."

It would be unjust to regard the author as responsible for the opinions which we have cited from the discourse of Colonel Crawghan, did not the same appear in other parts of the work. In a note, M. DE C. says, 'Can it be, then, that their imagination, different from that of other men, rejects invincibly the contemplation of the future; and that, like mere animals, they were destined to fashion their lives according only to the time present? Can Nature have refused them the extent of comprehension necessary to discern utility in what is new? Can it be pre-ordained that they shall never understand husbandry, domestic cares, civilization, morality, and laws? It is very probable.' These reflections, we imagine, were not the result of 'deep meditation.'

The Second Volume opens with an antient tradition of the *Cherokees;* which, we are informed, was translated from the native language by order of *Attaculla-culla,* (commonly known by the name of the *Little Carpenter,*) in 1774, and sent to Lord William Campbell, then Governor of South Carolina.

"From the beginning of time (says the tradition,) the power of willing rested in the head of *Agan-Kitchee-Manitou.* One day, it entered into his thought to descend on the earth, that he might see what was there transacting. In the shape of various animals, he examined the condition of the living part of the creation. After several adventures, he was travelling in the form of a man, reflecting on what he had seen, when he inadvertently fell into a pit which had been lightly covered with moss and brushwood. At the bottom, he found a panther, two wolves, a fox, and *Wabémat,* a native of a neighbouring village." [The Deity then released the quadrupeds, and remained conversing with *Wabémat* till the master of the pit arrived.]. "Indefatigable hunter, and brave warrior," said *Manitou,* "save our lives." "What are your lives to me?" returned the huntsman—"I have lost my prey, thou art the cause, and I will eat thee, since I am hungry, and am the strongest." "Eat us not," said *Manitou,* "and before sunset I will give thee a fat buffalo, whose skin may serve to cover my unfortunate companion." "Let your companion hunt for himself: I will have the whole buffalo, or I kill." "Be it so." When the promised buffalo arrived, and they were released from the pit, *Wabémat* said to *Manitou,* "Do not go home with this eater of men, but come with me." *Manitou* followed him."

We are then told that the fire of *Wabémat*'s hearth burnt bright, but the kettle stood aloof, and some roots roasted in the ashes were the only provisions which he had to offer. On inquiry, *Wabémat,* not without apprehension of incurring ridicule, acknowleged an abhorrence at the idea of feasting on the flesh of his fellow-creatures; and that, though on this account he was regarded as weak and pusillanimous by his neighbours, he had no wish to conquer his repugnance.

"When

"When I cannot take game (said he) I supply its place with roots; and if my family are satisfied, I am content."—"*Wabémat*," said *Manitou*, "bless the moment at which I fell into the pit! Thy temperance and humanity are about to receive their reward; the hour of retribution is arrived. Do you chuse to wait till death, the time of which is uncertain, shall deliver you from the burthen of life, in order to enjoy the pure, unalterable, eternal happiness of spirits; or to content thyself with the plenitude of such felicity as can be tasted on earth, and which shall begin from this instant?" The good but simple *Wabémat* wished the hour of happiness not to be deferred. "It is necessary then," said *Manitou*, "that you cease to be a man. You must part with the faculty of speech, that your felicity may not be disturbed by vain ideas. That gift shall be replaced by accents more simple, but equally expressive and useful. As formerly, you shall be susceptible of love, of conjugal and paternal affection: thy children shall respect thee, and in thine age shall assist thee. The absence of anxieties shall supply the place of many enjoyments; and in order that you may conceive and execute every project necessary to the well-being of yourself and family, memory, foresight, and judgment shall be preserved to you."

To conclude:—*Wabémat* and his family underwent immediate transformation, and were conveyed to the Lake *Michigan*, where they appeared as the first family of *Amicks* (Castors) that existed on earth. From regard to this their divine origin, the hunters, when they find an establishment of the beavers, always allow a certain proportion of them to escape!—How well soever the image of aquatic happiness in northern lakes may accord with the ideas of a North American, we Europeans cannot contemplate it without experiencing, at least, a mental shivering.

There are some expressions in the tradition, as it appears in this work, for which we know not how to give the original credit; though the translation is presented to us with all the formalities of authenticity; "Translated by me, the undersigned interpreter of the King for the Cherokee language, residing at Sinica, June 17, 1774. *Adrien O'Harrah.*" We shall instance the following: "The astonishing perfectibility," said *Manitou*, "with which the Creator has endowed the understanding of man, &c. &c.—And after all, what is man, this Being so vain and so presumptuous? A living atom, whose generations pass over the earth like the shadow of the clouds driven by the winds. And this earth? a point in the immensity of the universe; one of the smallest globes among the millions of which it is composed." We cannot reconcile such passages with our most favourable opinion of Indian information; and are not a little tempted to attribute them to a love of embellishment.

The

The author has frequently entered into details concerning the management of the American farmers, and their husbandry. In the second volume, we find a curious account of the fondness of animals for salt, and the great advantage made of it by the farmer in governing them.

'With this bait he catches horses or cattle when necessary, tames those which have been long in the woods, makes himself followed, and, in short, entirely commands their will. In the middle of forests, it supplies the defect of enclosures, by drawing the animals regularly to inhabited places.'—'Although our animals, which live almost all the year at liberty, are rarely ill, they are sometimes subject to melancholy (*tristesse*); then we find it necessary to give them salt more frequently, mixing with it powdered brimstone and antimony. My grand panacea, especially for my horses, is assafœtida.—This appetite for salt does not manifest itself only among quadrupeds; innumerable quantities of wood-pidgeons cover our fields twice in the year, in their passage from the interior of the Continent towards the sea-coast, where they go to seek it.—One day, having remarked that my bees frequently settled on spots where brine had been spilt, I placed some grains of salt before their hives. What was my astonishment, when I saw them repeatedly tasting it with eagerness, and carrying it away with them! Before this experiment, I could not have believed that the manufacturers of honey could taste with pleasure an ingredient so different from the nectar of flowers.'

In the journey from the Lakes, a description is given of wooded marshes, some of which are called Bog-meadows. The ground, at the distance of a few feet below the surface, is said to be composed of a tissue of trees 'overthrown, we know not at what epoch, nor by what cause. In a marsh of five thousand acres, covered with most beautiful ash, maple, and other trees, an experiment was made to determine the quantity of wood beneath a surface of ten square perches. After the growing trees which covered the surface were felled, we dug to the depth of four feet; and it was found that the quantity of subterranean wood greatly exceeded that of the living trees.'

Travellers benighted in the forests of America are said to make a peculiar use of their shoes: 'of all our clothing, the shoes retain longest the odour of the body. With them, wolves and tiger-cats are kept off during the night, especially when the rain will not admit of making a fire. Placed at some distance on short poles, they become a rampart, under the shelter of which the traveller may securely repose at the foot of a tree. As soon as the animals scent that which announces the neighbourhood of man, they give a howl and retreat.'

The descriptions of travels in this publication appear in a form so irregular, as to discourage any attempt to mention them in a connected

connected series. The author did not propose to fetter himself by method, and we are in some degree obliged to follow his example.

The falls of *Niagara*, the wonders of which have been so often recorded, have likewise their place in this work, and are represented on two plates.—An entertaining account then occurs of a party of the native Americans, who were met in the woods near the border of Lake *Ontario:*

'They were a mixture of young *Mohawks* and *Cayugas*, who, as well as ourselves, had passed the day in fishing, and were now amusing themselves with telling stories. Next to courage in war, and address in the chace, nothing obtains greater influence among them than this talent. The attention paid in Europe to a sermon, a tragedy, or an academical discourse, is not comparable to that with which these men listen to the recitals of their orators. They have stories both gay and serious. The first are almost always founded on some peculiarity in our customs which appears to them ridiculous; the others are, of adventures in hunting, of travels, or of military exploits.

'One of the Indians having just finished his narrative, I jogged the next with my elbow, saying to him, "Do you not see it is your turn? Rise then, and tell us something."—This liberty was not well taken, and produced altercation. To stifle, in the beginning, this disposition to quarrel, I said to him, "Will you have any wine?" "I had rather," he replied, "have that which is six times wine; (meaning brandy) have you any?" "No."—Another man rising to speak, every one listened with attention."

Among the stories related, was one of which the subject was the *Land of Dreams*, inhabited by a people of whom the great *Okemaw* was the chief. They lived undisturbed till 'white, bearded, men' arrived among them. Humble at first, the strangers were received with hospitality: but, having once obtained a footing, their manners altered; till, for their usurpations and other offences, *Okemaw* drove them out of the country.

'In a short time, they began gradually to return, and to spread themselves among the villages; of which *Okemaw* being informed, he ordered them to be brought before him:—"Obstinate Whites!" said the Chief, "you deceive yourselves, if you think to do here as you have done in the land of *Nishy-norbays* (by this name, the native Americans distinguish themselves from the Europeans): you shall not corrupt us, with your liquors of fire and madness, to surrender our lands; we are not so easy to deceive. Drink your own liquors; may they destroy ye as they have already destroyed so many brave nations." One of the white jugglers, more angry than the rest, had the audacity to strike the Great Chief; who coolly said, "Thou hast been ill educated in thy country;" and immediately, with his powerful arm, he threw him down, and laid hold of his hair to scalp

him: but what was his astonishment on finding that it did not grow from his head! *Okemaw*, as well as his people, having never seen the like before, involuntarily burst into a fit of laughter, so immoderate as to distract their attention; a circumstance of which the Juggler and his companions dexterously profited, and made their escape, leaving the false hair in the hands of the astonished Chief. They immediately embarked for their own country; and from that time the bearded Whites have been no more seen in *Hoppajewot*, the land of dreams.'

We are also presented with a description of the manner in which the Indians adopt a new member into a family.

In Vol. III. we meet with an account of the remains of pyramids, artificial mounts, and fortifications, that have been discovered in different parts of the Continent; accompanied by two plans of the fortifications of the antient natives, one near Lake *Erie*, and the other on the banks of the *Ohio*, taken on the spot. Whether any of these may vie in point of antiquity with the pyramids of Egypt, cannot be known:—since none of the tribes existing, or with whom the Europeans have had communication, pretend to any knowlege, or even any tradition, respecting their origin. In other respects, they make a small figure in the comparison. There is reason, however, for believing that they were constructed by a people distinct from any of the nations now inhabiting the Continent of North America.

'Many of these works are now covered with trees. Nothing has been found to encourage a belief that these antient people understood the use of iron. Dr. Cuttler, who has carefully examined the oaks which have fallen with age, and likewise those which are yet in their vigour, is of opinion that the latter are a second generation; which idea removes back perhaps a thousand years, the epoch at which these fortifications were constructed.'

Where little is known, as in this case, conjecture has an extensive range. Admitting that there have been two and only two generations of oaks, the first might not have made its appearance above ground till many centuries after the spot had been deserted; and the place might not have become a desert till many centuries after the fortifications were erected. The author of these volumes has inserted a letter written by an inhabitant of a colony near the *Ohio* to Dr. Witherspoon, President of the College at *Prince Town*, dated May 1789: from which we have taken the following extract:

"Mr. Worth tells me also that he has seen, on one of the banks of the *Monongahela*, a rock the surface of which appeared to have been polished with care; and on it were engraven, in six columns, figures of men, animals, birds, and fish: under which were several lines written in characters that were unknown both to him and to those

those who have since seen them. In other Cantons, there have been discovered some tombs containing human bodies, inclosed in coffins of baked earth, varnished; the arms and legs being in a kind of cylinders of the same earth, joined to the body of the coffin.'

A narrative by Mr. Isaac Stuart is likewise inserted, which was published in the Charlestown Gazette for March 1782. The heads of this narrative are, that, eighteen years anterior to that date, Mr. Stuart was taken prisoner by the Indians, with other Whites, most of whom were massacred. He had the good fortune to be adopted: which event took place at a village situated on the *Wabash*. After having lived there two years, a Spaniard arrived, who said he came from *New Mexico*, and was travelling to make discoveries. He wanted two rowers, and obtained from the Chiefs permission to take Stuart and a man named John Davey, a native of Wales. They embarked, and went down the *Ohio* and the *Mississippi* to the mouth of the *Red River*, up which they proceeded seven hundred miles, and entered a branch called *Post River*; where they found themselves in the middle of a nation of White People with red hair.—On the day after their arrival, John Davey said that these people spoke the language of his country, and that he was determined to remain among them. He learnt from them that their ancestors had first settled on the borders of that river, a short time after the conquest of Mexico by the Spaniards.—Mr. Stuart also mentions that they shewed him several rolls of parchment, on which were a great number of characters written with blue ink: but not understanding the Welsh, and Davey not being able to read, he could give no account of their contents. After having passed some time among these Welsh, Mr. Stuart and the Spaniard departed. In the remainder of his travels, Mr. S. saw many strange things, and at length arrived safely in South Carolina.—There appears to us so little of probability in any part of this narrative, that we do not imagine that it will much contribnte to the support of the accounts of Welsh discoveries in America.

M. DE CREVECOEUR has taken notice of several manufactories and commercial establishments; and he has drawn up a table to shew the progress of population in the United States, in which he estimates the annual increase at three and one half per cent.; the population for 1790 being stated at four millions, and for the end of the year 1800, at 5,642,142.—Of the increased value of lands, he says; 'Those which four years ago were estimated at two piastres per acre will now sell for three, or three and one half, and some for five, according to circumstances of fertility or situation.

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In general, it is considered that lands which are inhabited in the proportion of twenty people to the square mile are worth fourteen piastres, or three guineas per acre. The increase of specie, and the troubles in Europe, have much contributed to this augmentation of price.—The lands in the United States which, as yet, (in 1796) are neither occupied nor sold, are computed at 431,662,336 acres, more than one half of which lie beyond the *Ohio.*' The author has also constructed a table, to exhibit the probable period of time at which the population of the States shall have augmented to the proportion of twenty persons for every square mile of territory, on the supposition that the annual increase will continue to be at the rate of $3\frac{1}{2}$ per cent. This degree of population, he estimates, will be attained in the year 1834; the number of people then being stated at 18,406,150: by which time, he reckons, there will be no vacant lands remaining. He cannot surely imagine that, with a population of $18\frac{1}{2}$ millions, all the lands will be occupied: it would be supposing the quantity of occupied land to increase in nearly a four-fold proportion to the increase of people.—He informs us that the quantity of cleared land, in the whole extent of the United States, is estimated at 31,602,000 acres! Whether this be for the year 1796 or 1798 is not made very clear: in either case, it is not more than $6\frac{1}{2}$ acres per head; whereas, if the whole (463 millions of acres) should be occupied by $18\frac{1}{2}$ millions of people, it would be in the proportion of 25 acres to each person.—This estimate seems intended to say, "Make haste and buy, while there is yet land to be sold!"

Many circumstances, both of a public and a private nature, are here related of General Washington, of whose great character the author appears to be a sincere admirer. To him, the dedication of the work is addressed, though published so long after his death;—or rather it is an *Eloge* on his memory, in the form of a dedication.

Those readers, who have seen the *Lettres d'un Cultivateur Américain,* will think that some parts of that publication bear too great a resemblance to the present. We have already remarked the similarity of sentiments; and the council at *Onondaga,* also, cannot but remind us of the debates among the Indian Chiefs, on the proposition of *White Eyes* recommending the cultivation of lands, as represented in the former letters.—In his reflections, the author sometimes falls into a species of sentimental declamation, which seems more indigenous to the writers of the Continent than to those of this country; and which perhaps is more captivating in other European states, than among the generality of English readers. These, however,

are slight defects, and may well be tolerated in a work which affords so considerable a portion of entertainment.

M. DE CREVECOEUR has occasionally introduced subjects unconnected with the description of the North American provinces. An antient castle in Germany is described in the style of our modern romances; and a history is related of *Don John of Braganza*, (said to be a son of King John the fifth of Portugal, by an English lady,) who was several years midshipman on board a British ship of war. The interest of this story must depend on the degree of credit which may be attached to it: if a relation of facts, it is not less curious than interesting.

We shall close our account of these volumes with remarking on an opinion which the author countenances respecting the first discovery of America. The last chapter describes a conversation, in which a gentleman, speaking of the publications in his possession relative to this great discovery, says, "There has not appeared in Europe a chart of this country, which is not to be found in my collection. I have even a copy of that which the Chevalier *Martin Bêhem* made for King John the Second of Portugal, more than 300 years ago."—In a note at the end of the volume, an account is given of *Martin Bêhem*, which states that

'In 1484, he discovered Brasil, and likewise the Straits of *Magellan*. His letters, preserved in the archives of his native city, dated 1486, speak of his discoveries, and voyages, undertaken six years before that of *Christopher Columbus*. It was *Martin Bêhem* who gave to this celebrated navigator the first idea of a Western Continent. As to *Magellan*, he did not form the project of passing the strait, till after having seen, in the hands of King John, a chart of that part of America which *Bêhem* had drawn and given to the King.—*Bêhem* returned to *Nuremberg* in 1492, and there caused a globe to be constructed, on which he delineated the discoveries that he had made, and to which he had given the name of the Western Lands. This globe was finished in the same year that *Christopher Columbus* departed on his first voyage.'

Arguments, if necessary, could with ease be produced to shew how remote this relation is from probability: but, in assertions respecting facts, evidence demonstrates better than argument. A description of the terrestrial globe made by *Martin Bêhem* in 1492, at *Nuremberg*, has been published by *M. Murr*; and likewise a translation from the German into the French language, by H. I. Jansen, Paris, intitled *Notice sur le Chevalier M. Behaim; par M. de Murr;* with a plate representing part of his globe, from the Canary Islands westward to China. In this space, no American Continent appears: but the sea is represented as affording a clear passage (a few islands excepted) from Europe to *Cipangu*; i. e. Japan.

Capt. B...y. ART.

ART. II. M. DE LA HARPE's *Lycæum, or Course of Lectures on Antient and Modern Literature.*

[*Article continued from the last Appendix, p.* 480—492.]

PREFIXED to the IVth volume of this work, is an introduction of considerable length, including a narrative of the state of literature in Europe, from the age of Augustus to that of Louis XIV.; which was delivered as a lecture, at the Lycæum, in 1797.

'We have advanced (says the eloquent Lecturer) rapidly through those marvellous ages of Greece and Rome, which have been periods of the glory and prodigies of the human mind. We have travelled among the great monuments of which time has at least respected a part sufficient to make us for ever regret the rest. After having been so long buried in that vast and profound darkness and barbarism which obscured the earth, till the first dawn of reason, taste, labour, and erudition, they were at length cleared and disincumbered from the rubbish by which they were covered and rendered unintelligible. Genius, when awaking as from a long sleep, could not but behold them with that enthusiasm which aspires to equal, or at least to imitate what it admires; and at length satiety, paradox, and ill-directed competition, have insulted them with proud ingratitude, at the period at which the mind grew subtil and contentious, at the same time that great talents became rare; at that period at which the presumption of judging surpasses the want of enjoyment; at which, whatever has been done is depreciated in proportion as it becomes more difficult to excel; at which, in short, scarcely any other taste is left, than the blind love of novelty, of whatever kind it may be; a perverse and depraved taste, which calumniates the past, corrupts the present, and, mistaking every principle of what is excellent and beautiful, hardly leaves any thing to hope for the future.'

After these severe reflections on the modern rage for discovering that whatever was and is *is wrong*, the censor proceeds to recapitulate his former lectures; and to remind his audience of the excellence of Homer and Virgil in the epopee; of Sophocles and Euripides in tragedy; of Pindar at the Olympic games; of Horace at the court of Augustus; and of the eloquence of Demosthenes and Cicero at Athens and Rome, in support of that republican liberty which has been so ridiculously counterfeited in our own times, and exchanged for factious servitude and hypocritical tyranny.

'In descending to the next age, a declension is already visible. The brilliant passages in Lucan, all the wit of Pliny and Seneca, and the points of Martial, serve but to heighten the characters of Cicero, Virgil, and Catullus. Greece could now boast only her Plutarch, and Rome her Quintilian. Rome, however, more happy than Greece, produced one other writer of a higher class, equal if not superior to all whom the best periods of her history could produce,—a

Tacitus, who stands with head erect like a lofty column among ruins.

'Beyond this period, what shall we find? Nothing but deserts and darkness!'—

'During the happy times of the Antonines, a few men of wit and taste did indeed appear, such as Longinus the critic, and Lucian the satirical moralist; afterward, historians of the second order, such as Amianus Marcellinus, Herodian, and others: but in eloquence and poetry, Greece and Rome were reduced to declaimers and sophists: the one selling panegyrics, and the other plunged in scholastic disputes.'

This censure, however, is confined to Pagan eloquence: for, in spite of the Jacobins and infidels with whom he was surrounded, the lecturer boldly celebrates the eloquence of the Greek fathers, with all the zeal and courage of a Christian martyr.

In this introduction, the author has painted the horrors of the French revolution in blacker colours than we should have thought would be tolerated in a public assembly, or even in a printed book, at Paris, where so many of the principal agents still exist. After this digression, he continues, by observing that Charlemagne, perhaps, retarded the progress of the French language, by giving the preference in his vast dominions to the Roman tongue; which became in France the general language for all public acts, till the time of Francis I. This prince confided to the clergy the preservation of MSS. and the Greek and Latin languages; all which, without them, would have been lost for ever to Europe, and perhaps to the whole earth. The first attempts at writing in a modern dialect originated in Italy, with Danté and Petrarch in poetry, and Boccacio in prose. These authors are still generally read, and are the standards of Italian. In no other country are these first attempts intelligible, and worth preserving.—The lecturer then remarks that the invention of printing, in the middle of the xvth century, was productive of infinite good and evil; and having discussed both these effects very fairly, he proceeds in his narrative of the progress of letters. The first works, he says, which issued from the press, were dictated by the Latin muses! Vida, Fracastorius, Politian, Sadolet, Erasmus, Sanazarius, and a crowd of others, manifested in their writings not only genius, but the good taste and elegance of Roman antiquity. Soon afterward, by the fall of the Grecian empire and the rise of the Medici family, a taste for Greek literature and arts was added to the Roman; and such models in poetry, architecture, sculpture, and painting, were produced, as rivalled the age of Augustus.—Here the orator exclaims against the

rapacity

rapacity and pillage of his countrymen, in robbing Italy of her national ornaments.

'All Europe has uttered a cry of indignation; a cry which has been heard and repeated even by ourselves, when we have seen this country robbed of its monuments which were the public property of the inhabitants, and the objects of their particular worship. It has been said that, among polished people, neither victory, nor even the example of the Romans authorized these spoliations; which are always odious, and are equally condemned by policy, and by the morality of nations.

'The magnificence, taste, and patronage of Lorenzo de Medici, and his family, excited an ambition in the rest of Europe to cultivate these arts; and the celebrated Roman Pontiff Leo X. caused antient MSS. to be sought, which were multiplied by the press, enriched by instructive observations, and illustrated by learned commentaries. It was now that the thick and injurious veil, which barbarism had spred over the beauties of antiquity, was torn and thrown aside.'

Ariosto, Tasso, Trissini, Guicciardini, Fra Paolo, &c. are next mentioned as happy cultivators of their own language, and of the taste of antiquity. The author then slightly notices the literary favourites of other countries; who, stimulated by the success of the Italians, "lisped in numbers," and in the prose of their own dialects. These are often characterized by a single word, which calls to the recollection of his readers their principal excellences or defects. He allows more merit to Shakspeare than has been granted by most of his countrymen, who all see his irregularities, but neither can nor will understand and feel his beauties; and when he introduces Copernicus, Kepler, and Galileo, at the head of mathematicians and astronomers, he very liberally says:

'England, destined soon to become the legislatrix of the world in the sublimer sciences, and in sound metaphysics, might early have opposed to all the great men of other countries whom I have named, the Chancellor Bacon, one of the boldest and most independant reasoners and experimental philosophers that any age or nation can boast; and who owes every thing to his own profound contemplation and view of nature, as if she had never been explored before. It was he who, according to the title which he has ventured to give to his immortal book, *(Novum Scientiarum Organum)* taught philosophy not to venture to advance a single step, without leaning on the crutch of experiment; and it is by following these lessons that the study of nature is become all that it can or ought to be, the science of facts; the only science permitted to man, who was so long condemned to visionary reasoning about causes, by a proud forgetfullness that he was ordained by his nature to remain ignorant of them.'

On the minor poets and prose writers of his own country, the lecturer dwells but little, previously to the age of Louis XIV. but he afterward becomes very diffuse, and very eloquent; lamenting pathetically the destruction of many noble productions of art, monuments, and public buildings, during the horrors of revolution,—and, 'which is still worse, the corruption of the morals and consciences of the people.'

Having given so ample an account of this *Introduction* to the IVth Vol. we can allow but little space to its contents; which concern a part of the French literary history that is so recent, and has been so often written, that the out-line is well known, even to shallow and superficial readers. M. DE LA HARPE'S criticisms, discriminations, and reflections, however just and ingenious, and however amusing to his countrymen, must also be less interesting to English readers than his analysis of antient authors enshrined in dead languages; concerning which the whole learned world is equally curious.

In tracing the literary annals of France, during the reign of Louis XIV. the lecturer begins with poetry; characterizing the productions of writers who preceded and were subsequent to *Marot*, down to the time of *Corneille*. He then treats of the French theatre in general, and of *Pierre Corneille* in particular; enumerating also the tragic poets who flourished before him. The rest of this Vol., and part of the next, are occupied by a parallel between *Corneille* and *Racine*, and an analysis of their principal dramas: which will teach the writer's countrymen how to *hear*, and foreigners how to *read* these authors. M. DE LA HARPE seems to hold the scales steadily and fairly: but the nation itself is divided in its opinions concerning the merit of these poets; and who can satisfy partizans, but those who flatter their prejudices?

Vol. v.—After having employed half of this Vol. in analyzing the remaining TRAGEDIES of *Racine*, and pursuing his parallel between the two great dramatists, the author proceeds to speak of *Rotrou*, *Duryer*, *Thomas Corneille*, *Quinault*, *Campistron*, *Duché*, and *La Fosse*; and then turning to COMEDY during the same reign, after a spirited introduction, and a chapter on comedy in general before the appearance of *Moliere*, he concludes this Volume by a very amusing section on the works of that high priest of Thalia.

The account of *Moliere* and his writings is very amusing; and this is a part of M. LA HARPE'S publication which, if we could afford room, we should wish to insert: but the work is so voluminous, and our account of it is already swelled to such an uncommon bulk and number of articles for a single production, that we must desist.

Vol.

Vol. VI.—Of comic poets of an inferior order in the reign of Louis XIV. viz. *Quinault*, *Baron*, *Bruyeis*, and *Palaprat*, &c. These two last wrote in conjunction, like our Beaumont and Fletcher; they were the authors of *l'Avocat Patelin*, or rather the modernizers of that farcical comedy, which M. *Le Texier* now reads in London with so much *vis comica* and effect. *Boursault's Esope* has been imitated, or rather translated, by Vanbrugh, and his obligation was acknowleged: but we often, in these lectures meet with jokes, and even scenes, with which our countrymen have made free in a surreptitious manner.—The travels as well as the comedies of *Regnard* have furnished a very entertaining article.—The French are with reason proud of *Moliere*. His best plays certainly surpass in wit, humour, conduct, and character, all other comedies antient and modern of which we have any knowlege; and they have supplied materials for the comic writers of most nations; especially the English. From his productions, we have the Miser, Non Juror, Country Wife, Plain Dealer, Æsop, the Mock Doctor, Cheats of Scapin, &c.

In the Volume before us, after *Regnard*, we have an account of the plays of *Dufrény*, *Dancourt*, and *Hauteroche*:—of the operas during the reign of Louis XIV. written by *Quinault* and set by *Lulli*:—of the odes of *J. B. Rousseau*, regarded by the French as the most finished lyric poetry in their language:—of *Boileau*, his satires and epistles, (this chapter contains some excellent criticism, in which the superior merit of this great poet, critic, and satirist, is fully displayed):—of *La Fontaine*, his fables and tales, (another excellent chapter); then of two writers of fables and tales in the manner of this inimitable author,—who, *pede claudo*, do not walk, but *limp* in his steps;—and then—of pastorals, and different kinds of light poetry.

Vol. VII. contains the second part of the age of Louis XIV. including *eloquence*, *history*, *philosophy*, *literature*, &c.

On forensic eloquence, or the eloquence of the bar, during this celebrated reign, M. DE LA HARPE is very severe. *Patru* and *Lemaitre* are the only two pleaders whom he has thought worthy of being named; and it is merely to censure their style of eloquence that even they are thus distinguished.

Pelisson's address to Louis XIV. in favour of the disgraced minister *Fouquet*, his friend and benefactor, is regarded by the lecturer as the most beautiful and impressive piece of eloquence that was produced during the XVIIth century: 'but this (he says) did not properly belong to the bar, and was not the work of a professed civilian, advocate, or pleader, nor even a juridical memorial; it was the labour of courageous friendship, defending an unfortunate individual who had been powerful;

the fruit of a true oratorical talent, animated by zeal and danger, and rendered memorable by the greatness of the occasion.'

The next section concerns encomiastic eloquence, addresses to sovereigns, public speeches in national assemblies, &c.

Section III. *Eloquence of the Pulpit*, and *Funeral Orations.*—M. DE LA HARPE has celebrated only the abilities of father *Bourdaloue* among plain orthodox preachers: but the funeral orations of *Bossuet*, *Flechier*, and *Massillon*, are duly noticed, and their beauties and defects are pointed out with nice discrimination and sound judgment. He has also given such extracts from them, as will make every reader of true taste and moral feeling eager to peruse the whole.

Chap. II. Sect. I. *History.*—The author's critique on the French historians of the period under consideration is admirable. Whether his remarks be slight or profound, political, philosophical, or moral, they are always lively, just, and pleasing; and though a loyalist, he conceals not the political errors of kings, nor the defects of the former government of France. When court dependants became historians, adulation guided their pens; and when Protestants were the annalists, they were so thoroughly determined to allow nothing to be right in a Catholic state, that they deviated from truth as widely as the flatterers. Impartial history can be expected only from strangers; and they are ignorant of facts, and unable to trace events to their source. M. DE LA H. seems to have some weighty charge to bring against *every* historian of his country.

Section II. *Memoirs.*—On this subject, the lecturer confines his remarks to political memoirs; such as those of Cardinal *De Retz*, *La Rochefoucault*, *Torcy*, &c. The character of *De Retz* is drawn with great ability.

Chap. III. Sect. I. *Metaphysics.*—*Descartes*, *Pascal*, *Fenelon*, *Malbranche*, *Bayle.*—Perfectly acquainted with the writings and principles of these authors, the lecturer is very eloquent in describing their several excellences and imperfections; defending neither *philosophes* nor fanatics, when they abandon reason as their guide. 'Fanaticism (he remarks), whether religious or philosophical, is the child of pride, a violent and terrible power! Reason, on the contrary, even when she deceives us, is a mild and tranquil power, free from passion, and never inducing men to quarrel with each other.' The author appears to be a very fair and rational metaphysician; pleads the cause of religion against atheists; and confesses his ignorance, and the ignorance of human nature, concerning certain difficulties which are, and ever must remain unsolved. 'The works of God (he says) are finite only to himself; they will ever be infinite to us, not merely in the vast structure of the heavens, which seem to present

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sent to our bounded vision an image of omnipotence, but in the imperceptible structure of the insect which borders on nothing, and terminates the scale of beings.'—This, however, it will be said, is only good deism: but, in reviewing the funeral orations of the three great divines of his country, M. DE LA HARPE is a very pious and orthodox Christian.

Many pages are properly bestowed on *Bayle*; whose amazing extent of knowlege, and whose clear and natural style, together with the quantity of curious articles which he has amassed together, must always procure for him a shelf in the libraries of those who furnish themselves with books for instruction. The lecturer resolutely defends him from the charge of atheism, and makes him almost a Christian. 'Though in his numerous writings he carries freedom of thought much farther than any author had gone before him, yet this was done with such art and precaution as still left a doubt whether it proceeded from a fixed incredulity, or was the sport of a mind naturally prone to dispute and controversy. It is certain that, except in these metaphysical excursions, where he delights in sustaining all kinds of systems, he never speaks of the objects of Revelation but with a respect which appears to be sincere; and with a tone of affirmation which, if false, would form a degree of hypocrisy of which he seems to have been incapable.'

Section II. *Moral Writers.*—Here the author discusses and defends the merit of *Fenelon's Telemachus*, speaks of the *Moral Essays* of *Nicole*, the *Institution of a Prince* by *Duguet*, the *Maxims* of *La Rochefoucault*, (among which he disputes the truth of many,) and some of those of *La Bruyere*, whom he regards as a better moralist, and a far superior writer. Lastly, he characterizes *Saint Evremond*, whose writings had great repute during his life, though they have almost ceased to be read in late years; several of which are here pointed out as ingenious and pleasing.

This volume is closed by short sections on *Miscellaneous Literature;—Romances, Tales, Letters, Translations*, and *Criticism.*

Vols. VIII. IX. and X. are wholly occupied by the works of *Voltaire.*

Prefixed to Vol. VIII. we have a bold and perilous discourse, pronounced at the Lycæum in the year 1794, against the revolution, its heroes, and its horrors; which occupies 40 pages. The author then devotes 160 pages to a defence of the *Henriade*, which, with all his friendly partiality, he cannot mould into a perfect epic poem. He is obliged to allow some of its defects: but he endeavours to compensate for them by pointing out the fine lines which it contains. He then discusses *Voltaire*'s other

poems, heroic and heroi-comic, didactic, philosophic, descriptive, amatory, mythological, &c.

VOL. IX. *Sequel of the* XVIIIth *century.*—*Of the Tragedies of Voltaire.*—These are all analyzed, and a history is given of their first reception, and subsequent favour or neglect. This part of the present work has been ably *reviewed* by M. *Geoffroi*, a powerful critic; who has pointed out and censured the lecturer's partiality to *Voltaire*, at the expence of *Racine*.

VOL. X.—A continuation of the dramatic works of *Voltaire* entirely occupies this volume. Here M. DE LA HARPE has analyzed and commented on each of the tragedies of this fertile writer, which had not been examined in the preceding volume, and has given us his opinion of the style of each. The merit of *Voltaire* as a dramatist is here estimated somewhat higher than we have been accustomed to place it: but we shall not dispute with the French on the merit of their own writers, which is always well argued and discussed by themselves, before their rank is settled in their national literary republic. Perhaps no author of any country had ever more admirers and more enemies than *Voltaire*; and commendation and reproof are equally his due from a large portion of mankind. As an epic poet, a dramatist, an historian, a novellist, an essayist, and a miscellaneous writer, he certainly merited universal applause: but the impiety and licentiousness of some of his productions excite the strongest censure from every friend to religion and virtue. His wit, humour, fancy, and, in his smaller pieces, the good taste of his sentiments and the elegance of his versification, are above all comparison and all praise; and so various were his talents, that there is scarcely any species of writing in which he has not left such specimens of his abilities, as almost intitle his genius to the claim of universality.

M. DE LA HARPE was the *élève* of *Voltaire*, and long intimately connected with him and his brother wits and *philosophes*; and though he has for some time quitted the latter sect, he still appears as his eulogist and champion, *à toute outrance*. As a tragic writer, however, though four of his plays (*Zaire*, *Alzire*, *Merope*, and *Mahomet*,) are unanimously allowed by his countrymen to be excellent, yet the rest of his numerous dramas are so inferior to these, that few natives of France will permit him to rank on a level with *Racine*. The parallel lately drawn by M. *Geoffroi*, between these two poets, seems to have taken *Voltaire* out of the hands of his partizans, and put him in his right place; which is, however, beneath that of no other French dramatic writer, except *Corneille*, the father of their stage.

Soon

Soon after the decease of *Voltaire*, *Linguet* proposed to publish an edition of his works, purified from all profaneness and licentiousness; such an edition as should contain nothing that could offend the most delicate or moral mind, disgrace the library of the grave or the toilette of the fair, or that ought to be locked up and concealed from youth. Were we to take away from some depraved writers all that is offensive to decency and good morals, we should annihilate them: but this is not the case with *Voltaire*.

We must reserve our notice of M. DE LA HARPE's XIth and XIIth Vols. for another article.

Dr B...y.

[*To be continued.*]

ART. III. *Correspondance Littéraire*, &c.; i. e. Literary Correspondence, addressed to his Imperial Highness the Grand Duke, afterward Emperor of Russia; and to the Count *Andrew Schowalow*, Chamberlain to the Empress Catherine II; from 1774, to 1789. By JOHN FRANCIS LA HARPE. 4 Vols. 8vo. Paris. 1801. Imported by De Boffe, London. Price 1l. 4s. sewed.

WE have always regarded the late Empress Catharine as a wise princess, and a great stateswoman; though we had no reverence for her private character. We admired her virtues in the plural number more than in the singular. Her great abilities and enlarged views enabled her to govern, during many years, the most extended empire and uncivilized people in Europe; and she held private correspondence with almost all persons of great abilities on the globe, whose fame had come to her knowlege. *Voltaire*, *Diderot*, and *D'Alembert*, were her confidential correspondents and extra cabinet counsellors; and they flattered her ambition by recommending to her the destruction of the Turkish empire, in order to restore the Grecian republics, and re-establish the rights of man. It does not appear, however, that the poet, the philosopher, or the mathematician, ever ventured even to hint at the emancipation of her own enslaved subjects.

Voltaire was a sort of confessor to her imperial majesty: *D'Alembert* and *Diderot* she enlisted by benefits, and by offers of great establishments in Russia; and LA HARPE she engaged as a lively young writer and amusing correspondent for her son Paul, in order to divert his attention from that government which she had usurped from him: foreseeing, perhaps, what a wild sovereign he would become, if allowed to possess his birth-right. The publication before us does not present us with any answers to these letters from M. LA HARPE. They consist, indeed, of mere literary *gossip*, totally free from poli-

tics; and it does not seem as if the rivalry, quarrels, successes, or miscarriages, of the writers of a distant kingdom, could contribute much to enlighten a young prince in the art of government; or furnish subjects of reply from a Grand Duke, who was heir to a vast empire, and who had many things to learn of much higher importance than the literary cabals of Paris.

As prefatory matter, the author has given a dialogue between himself and a young man, who tells him what the world said, and would say, of this work;—of his having apostatized from *philosophism*, and yet having published letters that were written while he was in close connection with the High Priest of infidelity and his subordinate *clergy*. M. LA HARPE defends himself as well as he can. He denies that he ever was an Atheist, or pushed his zeal for the principles of Democritus or Epicurus so far, (though an unbeliever,) as to exercise that spirit of proselytism which was always the rage of the sect, and which he has often ridiculed. 'Voltaire, (he says), in his language, which was always a parody on the Scriptures, constantly reproached my want of *zeal for the house of the Lord.*' Moreover, the Lycæum lecturer promises that, in his *History of Philosophy*, which is to terminate his course, he will disclose all the mysteries of the literary Pandæmonium.

The first letter in this collection, dated in 1774, turns on jurisprudence, and gives an account of three remarkable trials that had then occupicd the Parisian public mind. The letter is long, and the subjects in litigation are not very interesting to English readers; yet the writer has such vivacity of style, and facility of expression, that whoever begins to read any of his narratives will proceed. Two of these trials, indeed, concern individuals whose names are well known to all Europe: viz. *Beaumarchais*, the celebrated author of *Figaro* and the *Barbier de Seville*; and *Linguet*, a perturbed spirit, and famous journalist, who was in England previously to his residence in the Bastille; and who, on his enlargement, having quarrelled with the whole body of Advocates, was struck off the list, and prohibited from ever pleading again in any of the courts of law. Poor *Linguet*, with real forensic eloquence, knowlege, wit, and sarcasm, was ever fishing in troubled waters, and had an end put to his own troubles, during the reign of terror, by the guillotine!

Letter II. contains an account of a new edition of the Abbé *Raynal*'s Philosophical and Political History of the Commerce of the Europeans in the East Indies. It is well known that this lively and inaccurate writer abetted and abandoned Revolution, with equal impetuosity.

The succeeding epistle will be very entertaining to those who were acquainted with France nearly 30 years ago, and with the

the state of its theatres. *Azolan*, a new opera, not very successful, came out immediately after the *Orphée* of *Gluck*, with which *Rousseau* had been extremely pleased; and the latter being asked how he liked *Azolan*, he answered by a question in the favourite air of Orfeo: *che farò senza Euridice?* According to M. LA HARPE, *Gluck* had not a more passionate admirer than *Rousseau*, who never missed a single representation of his work; and indeed his music had reconciled this irritable Being to life. "While a man (said he) can enjoy so great a pleasure "during two hours, I think life is good for something." The letter-writer observes that 'music has great power over gloomy minds. It does not enliven, but it occupies them; it shakes the relaxed nerves, and awakens sentiment in a broken heart. I believe that no art operates with more promptitude, more powerfully, or more generally. Poetry produces greater effects; it speaks at once to the heart, the ear, and the understanding: but music addresses itself to the senses, and through that medium to the soul. Every man does not make use of his reason, but all have senses and a heart.'

Rousseau had himself begun an opera: but, when he had heard *Gluck*'s music, he abandoned the enterprize.

'This (says M. LA HARPE) will probably be no loss to the public. He is no longer at that age at which men write with (creative) genius; and there is a time when the most richly gifted have nothing left but the memory of what they have already done. The last ten pieces of *Voltaire*, written subsequently to *Tancrede*, are striking examples of this truth. He moves around the exhausted ideas of his first productions.—He has now been silent a whole month, which alarms me. Inaction is unnatural to him; and when he ceases to write, he must be near ceasing to live. His greatest pleasure, during the last twenty years, has been to write to-day something that he shall print to-morrow. "My dear friend, (said he to me one day) it is now 20 years since I have been at Paris: but during full 20 years, I have kept four presses at work night and day."——I should be sorry, however, (continues M. LA H.) if he ended his days like the learned *Jn. Le Clerc* in the last century; who, in extreme old age, had no other pleasure than that of sending copy to the printer, and receiving proofs from him, which were burnt in the back room, instead of going to press.'

We are next presented with biographical anecdotes of *Marmontel*, *Mercier*, and *Diderot*. Of the last, the author says;

'I have met *Diderot* since his return from Russia. He is never silent concerning the wonders which he has seen in that country, and at the court of Petersburg. He begins to talk of them to every one whom he meets, before he has said good morrow; and he declares that a longer residence at Petersburg would have turned his head. "I believe that I acted rightly (says he) in leaving the space of 600 leagues

between that sublime magician and myself." Making use of his own well-known expression, however, I remarked to him that, if he were far from the conjuring wand, he was still within its influence.'

In Letter IV. the writer speaks of *Gretry*, the favourite composer of French operas, as a musician full of grace and good taste in his compositions, and agreeable and well-bred in society. All this, we believe, was true 20 or 30 years ago: but, though he was generally successful in the theatre, and highly favoured by the court and men of letters, yet, tired of the monotony of prosperity, and of the easy means by which it was obtained, this M. *Gretry* now thinks himself able to form new combinations, to resolve the discords which philosophism has been so long preparing, and without temperament to arrive at perfectibility in social harmony, and to new organize mankind.

When speaking of *Philidor* the famous chess-player, who was a musician by profession, and who had composed several successful French comic operas, M. LA HARPE says: 'I never knew a good musician with so little wit as *Philidor* possessed. *Laborde*, himself a composer, and partial to *Philidor*, hearing him one day at a great dinner talking nonsense, to the astonishment of the whole company, called out, "Why now, there's an extraordinary man!—he has not a grain of *sense—he's all genius!*'

Letter V. is full of dramatic criticism. The *comédies larmoyantes* of *Lachaussée*, with the new kind of domestic and sentimental dramas of *Diderot*, *Sedaine*, and *Dorat*, are all well discussed.

The VIth epistle is rendered interesting by a character and some anecdotes of the worthy M. *de Malesherbes*, with the return of the Duke *de Choiseul* from banishment, &c.

Letter VII. 'Madame *de Baratinski*, sister-in-law to the Russian ambassador, playing in an evening party at questions and commands, and being asked, why was a woman like a Capuchin Friar?—answered—"*because both make rash vows.*" At the same play, another lady being asked what was the tomb of love? replied, *his field of battle.*—The Grand Duke is informed, in this letter, that a new work from the patriarch of Ferney (*Voltaire*) is expected; and that he promises to come to Paris in the Spring.

In Letter XIII. the Abbé *Delille*'s celebrity for versification begins to be proclaimed; and in the next, his poem intitled *Les Jardins* is discussed, and much praised for its beautiful verses, though little for its invention.

Letter XXIV. contains the best critique on the writings and character of *Rousseau* that we recollect to have seen. *Le Tourneur's*

neur's translation of *Shakspeare*, however, and Shakspeare himself, are depreciated in a contracted and prejudiced manner; the writer calling the divine poet of our hearts and feelings, 'a barbarous author of a barbarous age.' Was not France, and all Europe, equally barbarous? and had France any dramatic writer, contemporary with Shakspeare, *less* barbarous? M. LA H. does, indeed, condescend to allow that some sparks of genius may here and there be found in Shakspeare's *monstrous* plays, though they are void of all good sense, probability, style, unity, and propriety. *Voltaire* is more outrageous, and writes to LA HARPE on the subject with the true eloquence of a *Poissarde*:—

"I must tell you how angry I am with one *le Tourneur*, whom they call a secretary to some library: but he is not the secretary of common sense. Have you read the two volumes which this wretch has published, in which he would make us regard Shakspeare as the only model of true tragedy? He calls him *the god of theatres*; and he sacrifices all the French without distinction, to his idol, as they formerly sacrificed swine to Ceres. He never deigns to mention *Corneille* and *Racine!* These two great men are only included in the general proscription, without being named. Two volumes of this Shakspeare are already printed, which you would take to be plays written for a booth at a fair 200 years ago;—and this rascal has found means to engage the King, the Queen, and all the royal family to subscribe to this work!

"Have you read his abominable jargon, of which there will be five volumes more? Will you suffer such an affront to be put on France? Do you hate this impudent fool as you ought? There are not stocks, pillories, fools-caps, nor horse-whips sufficient in France for such a scoundrel. The blood boils in my old veins when speaking of him. If he has not put you in a passion, I shall consider you as totally impenetrable. To complete the mortification, I find that the monster has a party in France; and still to aggravate the horror, I was the first who formerly spoke of this Shakspeare in France; it was I who first pointed out to the French, some pearls which I had found in his enormous dunghill: but I little expected that I should thus contribute, at a distant time, to deprive *Racine* and *Corneille* of their laurels, in order to ornament with them the forehead of this strolling barbarian.—Try, I intreat you, to be in choler as much as I am, or I shall do you a mischief."

The author of these letters often repeats to M. *le Comte de Schowaloff*, that which he had before related to the Grand Duke.—In the account of what passed at the French Academy, on the reception of M. *de Chatellux*, he spares none of his friends. He mentions *Buffon*'s decay, *D'Alembert*'s defects in style and taste, &c. &c. We know not whether he has been equally communicative in the display of their merits.

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We have now given sufficient specimens of this first volume, to inform our readers what kind of entertainment this correspondence is likely to afford its purchasers. Repetitions and redundances occur on some subjects: but the letters are written with such spirit, that they cannot fail to amuse all except those authors who are still living, and who are treated with little ceremony.

The first letter in Vol. II. has no date, but it must have been written about 1777; and it is as hostile to equality, as equality would be to nobility, if it were nominally established. The author certainly speaks as much too contemptuously of *Danté* as of Shakspeare. Are the Italians, and many others who admire this bold and original writer, all fools? It is great arrogance in an individual to attack an author whose reputation has been long established, and to insinuate that he himself alone is wise. In M. LA HARPE's judgment of other authors in this letter, we observe great severity, and little wit. He has praised nothing throughout 20 pages, except Tom Jones; which, he allows, is the best novel that ever was written in any language.—The only *good thing* which the writer has said, as far as p. 24, occurs in speaking of M. *la Place*, an unfortunate scribe, who procured it to be inserted in the Abbé *Desfontaine*'s journal that he was dead; supposing that he should be lamented, and that his works would have more justice done to them: 'but the poor man was mistaken. The best thing that bad authors can do is to live; it is only great men who gain any thing by dying.'

A second *bon mot* (p. 42.). A bishop having published a pastoral letter, which was supposed to have been written by his chaplain, asked the Abbé *de Boileau*, the great poet's brother, whether he had read his last pastoral letter? "No, my lord, (said the abbé) have you?"

M. LA HARPE seems to have an unconquerable aversion to the poet *Dorat*, to whom he allows no kind of merit. There was a time, however, when he had his admirers: but not for his sprightliness, if there be a word of truth in the following epigram:

"How sad is this author in each merry flight!
How heavy he seems when he thinks to be light!
To each work that is short, how long the *prĕfāce*,
His flow'rs are all poppies, his smiles all grimace.
How insipid his praises! How sick'ning to hear;—
Yet a true happy coxcomb he tries to appear.
But if he has nought but his rhymes for his pleaders,
How wretched his mistress! how drowsy his readers!"

The prodigious success of the *Devin du Village* on its revival, after a new act of Orphée had failed, is curious; and M. LA HARPE's

HARPE's éloge of that little musical drama is well expressed. He says that we must ascribe the greatest part of this success to the intrinsic merit of the work itself, which may be regarded as a model of pastoral simplicity; and it has an additional charm in the perfect agreement of the music with the words, which is so entire that the ideas and modulations (melody) seem to have been conceived at the same instant.

At p. 63, we have another severe epigram, on a fraudulent author:

> " *Raquette* in pulpit has been thought
> With others' homilies to have shone;
> But I who know they're fairly bought,
> Can safely swear that they're his own."

The quarrel between the Abbé *Arnaud* and *Marmontel*, the first a Gluckist, the second a Piccinist, is well described. Both were men of singular merit, but jealous of each other, and each determined to bring the whole world over to his own opinion. Epigrams on this *tweedle-dum* and *tweedle-dee* quarrel are here buzzing and flying about like cock-chaffers on a summer's evening.

The death of the younger *Crebillon*, (1777) at the age of 70, is next recorded. This writer is always unjustly treated by M. LA HARPE, not for his licentious novels, but for his enmity to *Voltaire* and the *Philosophes*.—The Abbé *Maury*'s history is not highly favoured in these letters, though he is allowed to be a man of wit who had learned to write. He afterward proved that he could *speak* as well as *write*, in the conventional debates. —We are next introduced to the Abbé *de l'Epée*, and *Sicard*; then again to *Gretry*, *Gluck*, and *Piccini*;—and to *Marmontel*'s pamphlet on the *Revolutions in the French Music*.—Alas! more serious *revolutions* were hovering over the country! M. LA H. thinks with *Marmontel* on the subject of Italian melody. *Suard* and the Abbé *Arnaud* are violent Gluckists.

A good letter is given on the merit of *Sacchini*'s Olimpiade. It had great success at the Italian theatre, where the dialogue was declaimed without recitative; and it was so much approved that, after four nights, it was prohibited as an encroachment on the *Académie Royale de la Musique*.—We are then informed of the arrival of *Voltaire* at Paris, and of the death of *Lekain* the great tragic actor *. *Voltaire*'s reception, the honours paid to him by the literati at his apartments, and by the public at the theatre, his last sickness, death, and the impediments to his being buried in any church at Paris, are all minutely described. —*Rousseau* died in 1778, a few days after *Voltaire*, at the age of 70.

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* See *Memoirs of Lekain*, Art. x. of this Appendix.

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At p. 358. we have an account of Madame *de Genlis*, and the rise and progress of her celebrity. Her *Moral Comedies* were first played in 1779, by her own children in her own house: these M. LA HARPE praises very much, and justly: declaring, contrary to the general opinion, that they were written before he had the honour of that lady's acquaintance, and that he had no share in them. Having been present, however, at these juvenile exhibitions, with all the flower of Paris, he inserts in this letter a copy of some verses which he wrote on the occasion, full of rapture and enthusiasm. At p. 375, also, we have some more complimentary verses, addressed to this lady.

Vol. III *Beaumarchais'* Manifesto to the King of England.—More verses to Madame *de Genlis* on the last three volumes of her *Théatre de l'Education.*—Anecdotes concerning the life, writings and death, of the Abbé *de la Porte.*—Inedited verses, by *Voltaire*, to Frederick II. King of Prussia, when both were in peace and good humour with each other.—Epigrams on the Gluckists and Piccinists. The chiefs of the *Gluck* faction, *Suard* and the Abbé *Arnaud*, are not highly flattered in the first.—*Laborde's Essai sur la Musique* seems to be much too favourably characterized. If M. LA HARPE had possessed patience enough to read it, he would have found that the author's exclusive admiration of *Rameau*, and reliance on the Abbé *Roussier*, have rendered the critical part of his work extremely unpleasant to persons of taste, who are acquainted with other styles and other precepts. The historical part, however, as far as it concerns French musicians and lyric poets, is very amusing, and well written.

Our *Universal History* translated into French by M. *le Tourneur*, the translator of Shakspeare and others, is censured as dull and dry. Indeed, the style of Robertson and Hume has rendered most of our old historians illegible, and fit to be consulted only for facts.—Of *Voltaire's* funeral, celebrated at Berlin, the King of Prussia here gives an account; in which it is asserted that the philosopher had made his peace with the church, confessed himself, given alms, and performed several acts of piety, according to the rites of the catholic communion! The world, we believe, knows the reverse of all this.

At p. 144. we have a history of Madame *Du Deffant*, the blind lady, at whose house all wits and blue-stockings were wont to assemble, as at Mrs. Vesey's and the late Mrs. Montague's in England.—P. 191. An account of the favourable reception of *Piccini's* opera of *Iphiginie en Tauride.*—Eloge on the Abbé *Delille's* verses, which he read at the French academy, and with which M. LA HARPE says the assembly was enchanted.

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'He has certainly a peculiar talent for the mechanism of verse: a rare merit, after all that has been already done.'

P. 195. Anno 1781. Now the first seeds of revolution begin to spring up. 'Nothing (says the writer) has agitated the minds of men more than M. *Necker's Compte Rendu;* (State of the Finances in France;) 4000 copies have been sold every day, and now the whole sale amounts to 40,000.' Here the author is very fair and candid. He allows merit in the writing, mixed with a little too much self-importance:—but afterward, other faults are laid to *Necker*'s charge;—'and the least that he can say (remarks M. LA H.) is, that, in the most terrible experiment that ever was made, on which there was a cry from the four corners of the earth, *Tu t'es trompé*, "you are deceived," he ought to think himself too happy in confessing his fault, and in exclaiming—*Yes; I am deceived.*'

The death of *Turgot*, at the age of 49, is next recorded, and his character is given. He is said to have been inflexible; never giving way to circumstances: so that, with the purest intentions, he offended the people whom he meant to serve; when by a little management, and yielding to small obstacles, he might have succeeded.

P. 217. Female education more extended in France than usual. Talents in music, drawing, painting, and all pleasing accomplishments, are cultivated with enthusiasm.

P. 235. *Necker* dismissed—*Raynal* banished—Shakspeare's Richard IIId hissed outrageously—but it was suffered to be played four or five times, *to the great scandal of honest people.* So early as this year, 1781, the plan was formed of a new edition of the Encyclopedie, *par ordre des matieres*, not alphabetically incorporated, but each art and science printed separately. This work has been proceeding during the whole revolution, and has been lately finished in 200 vols. 4to.—the beaux Arts by Messrs. *Suard* and *Arnaud;* 'who are both possessed (says M. LA H.) of taste and knowlege, but so wholly warped by the spirit of party, that they will plant their prejudices in a book which should be consecrated solely to truth.'

After having highly extolled and berhymed Madame *de Genlis*, the author now seems to be falling off from his allegiance to that lady. Her being appointed governess to the sons of the D. *de Chartres*, in 1782, gave offence to all Paris; and M. LA HARPE discovers much conceit and vanity in the perpetual praises of the young people in their dialogues with Madame D'Almanc in Adèle and Théodore, which lady is supposed to be Madame *de Genlis* herself. The author seems to have been very partial to her, till she attacked the *philosophism* of the French academicians.

Vol. IV. p. 36. *Tom Jones*, a successful comedy, from Fielding's Novel.—56. The Duchess *du Maine*'s character admirably drawn, by Madame *de Stael.*—*Berquin's Ami des Enfans* approved.

Two admirable pages (64 & 65) occur on the easy criticism of a good poem or piece of music, by saying that *it is too long.*—On joys in the power of good-natured old age.—A false analysis and exposition of the plot of the tragedy of King Lear, from Shakspeare, in run at Paris: 19 successive representations were wormwood to M. LA HARPE and the French Dramatists.—P. 77. The Revolution (ann. 1783) advancing by great strides. Young *Mirabeau*, on *Lettres de Cachet and State Prisons*, gives the first broad symptoms: the present writer on his side.—Factious plays prohibited.—Licence increasing.—Mr. Thomas Paine's writings much admired at Paris.

We next meet with more abuse of King Lear.—*Voltaire*'s Memoirs of his own Life, and abuse of the King of Prussia—when the latter was safely entombed.—French Architecture censured.—*Linguet* and the Bastille.

Beaumarchais' Marriage de Figaro, we are told, is allowed, after two years' refusal by the King and government, to be publicly acted; 300 of the first people dined in the boxes belonging to the actors, in order to be sure of places on the first night; and three persons were suffocated in trying to get in at the first rush. M. LA H. says that the work is an *imbroglio*, in which there is a scrap of every thing, except probability, reason, and decency. One of its principal charms consisted in an open abuse of government, and of persons in office and authority of every kind; a gratification which the French public had never been permitted to enjoy before. Figaro was performed more than 100 times, and had been privately represented at the hotels of the nobility, previously to the King being teazed into granting a permission for its exhibition in the public theatre.

The author of the letters before us is certainly a rigid critic, who does not spare writers in prose or verse, either in their characters or works,—as they die off. To *Voltaire*'s productions late in life, and his posthumous works, he gives no quarter: on *Marmontel*'s poetry, particularly for the theatre, even while that writer was living, he is very severe: *Du Clos*'s eloquence is censured: *D'Alembert*'s spirit of cabal and depreciation of rival merit are not concealed; and no one work is mentioned as perfect:—yet, with all this severity to contemporary authors, M. LA HARPE is an agreeable and judicious commentator on the Greek and Roman classics, as well as on the productions of the middle ages, when neither envy nor prejudice warps his judgment.

A fifth Vol. of letters is promised, which is to be the last.

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Dr. B....y.

ART. IV. *Tableau de l'Agriculture Toscane;* i. e. A View of the Agriculture of Tuscany. By J. C. L. SIMONDE, of Geneva. 8vo. pp. 328. Geneva. 1801. Imported by De Boffe, London. Price 6s. sewed.

TUSCANY has been esteemed the Garden of Italy, and even of Europe; and it must be amusing to the sensible part of the British community to survey the habits, manners, and usages of its cultivators, (who have a distinct character from the corrupt inhabitants of its towns and cities,) and to contrast its climate, soil, and productions with those of other regions. M. SIMONDE informs us that he was advised by a friend not to compose a book in the French language on Tuscan agriculture, but to content himself with drawing up a memoir on this subject, to be read at the meeting of some agricultural society; because the information, which he would convey, could be of use only to two or three of the Southern Departments. We highly applaud him, however, for rejecting such counsel; since, notwithstanding that the practices of the Etrurian farmer cannot be advantageously transferred to many other parts of Europe, a species of pleasing instruction may be derived from comparative agriculture. Each country, province, and district, may have a system of culture peculiar to itself; by comparing which together, we perceive their respective advantages and disadvantages; we see how Providence, by varying the gifts of nature, diversifies our care and labour; and we discern that, if the husbandmen of the north cannot advantageously copy the cultivators of the south, they may mutually, by the intervention of knowlege and commerce, be led to respect and benefit each other.

M. SIMONDE presents himself to us not as a speculative, but as a practical farmer; and he undertakes merely to describe things as they actually exist. Having been employed as an agriculturist in Tuscany, as well as in the territory of Geneva, he deems himself qualified for the subject which he proposes to discuss; and he flatters himself that the picture must be interesting which shews the characteristic differences of countries favoured by nature, and embellished by human ingenuity. Desirous of giving an exact as well as a faithful account, he confines his observations to that part of Tuscany which is called *Val de Nievole*, in which the most industry and the best cultivation prevail. The land of this district is divided into three classes—*Plain*—*Hill*—and *Mountain*.

The first part, which treats of *the Plains*, is divided into twenty-three sections. It appears that the surface-soil of these plains consists of depositions of mud, six or seven feet thick, of inexpressible fertility, being the sediment of waters which once

covered them. This soil rests either on gravel or quick-sand; which is so full of springs that it is impossible to dig deep into it, or, without much trouble and expence, to lay a good foundation for houses. In consequence of its greasy nature and great fertility, it is called by the Italians *terra grassa.* All these fat and clayey soils, however, are not equally favourable to vegetation. In the plains of Italy, large tracks of land lie below the bed of the rivers which water them; and, from this circumstance, they are frequently inundated, or injured by excessive humidity. Through the dikes, raised along the banks of the rivers, water impregnated with saline particles often soaks or percolates in great quantities, and not only destroys the hope of the husbandman, but makes the cattle loathe the herbage.

To prevent so great an evil, the Tuscans have recourse to a process which they term *Colmats* or *Comblées;* of which, this author says, Mr. Arthur Young gives an erroneous account, and of which practice no use can be made in England. The intelligent reader, however, will perceive that this operation, so far from being inapplicable to England, has in fact been long practised by us. It is nothing more than what in Lincolnshire and some other places is called *warping*, or a process for raising the surface of low and marshy lands, by repeatedly flooding them, and allowing a succession of sediment to be deposited. In Italy, where the rains are so violent that they wash down the earth which covers the mountains, and render the rivers extremely muddy, this operation, under favourable circumstances, is sure of being attended with considerable effect.—If it be true, as M. Simonde states, that the water of the Mediterranean is continually rising, and threatens sooner or later to inundate all the plains of Italy, it is prudent in the inhabitants to avail themselves of every opportunity of elevating their surface, by means of the mud so abundantly brought down by their rivers.

To the account of their *Comblées*, is added that of their *arrosemens*, or irrigation, which appears to be conducted with much skill by the modern Etrurians. The water, however, is not collected and dispensed (as with us) in the irrigation of meadows, but in fertilizing their gardens; among the beds and borders of which, this element is carefully and economically conducted. Experiencing the effects of stagnant water in decaying the roots of plants, they are solicitous not only of bringing it on, but of carrying it off; being always attentive to give a sufficient fall to the canal in which it flows. They conduct it from the higher grounds to the lower in various ways; and in those places in which wells can be sunken, they elevate

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the fluid by means of machinery worked by a horse, for the purpose of irrigation.

As such pains are taken to promote vegetation in the kitchen-grounds, it might be reasonably supposed that the practice of gardening is carried to great perfection by the Tuscans: but the contrary, however, is the fact. The catalogue of their vegetables is small; and if they excel in the cultivation of the water-melon, and of a few other esculent plants, their mode of manuring is too disgusting to be described. The Tuscan garden will often offend the nose by its offensive odour, as highly as it delights the eye by its luxuriance. (See p. 15. and also p. 93. *Quant aux engrais*, &c. to *leurs terres*.)

From describing the garden culture of Tuscany, this intelligent author passes to that of the fields; which, though inferior in value to the irrigated *potageries*, exhibit a prospect of great abundance and variety. These fields being oblong parallelograms, generally about 100 feet wide, and 4 or 500 long, are separated by ditches, and planted round with Po or Lombardy poplars, employed as supports to the common vine of the plain; while two rows of mulberry trees extend lengthwise up the middle. Particular accounts are given of the management of this vine, which vegetates with great elegance and grace, but yields a most disagreeable beverage. The culture of the Mulberry tree is connected with the raising of the silk-worm, and the production of silk; an article of great commercial importance to this part of Italy. In the *Val de Nievole* alone, these insects annually consume, taking one year with another, eight millions of pounds weight of mulberry leaves, and produce 400,000 lbs. of *cocons*, or cods of silk. The capital employed in this ~~manufacture~~ is about 122,000 Florentine crowns: but it is added that this manufacture is on the decline.

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Under the article *Tillage*, the Tuscan plough and other simple implements of husbandry are delineated; together with the mode of drawing the furrows and sowing the seed. M. SIMONDE remarks that more than a pair of oxen are never used to draw a plough; and often only a pair of cows, with one person conducting them.

The course of crops occupies in general three or four years. In the 1st year they sow wheat, and in autumn lupins, which are ploughed in as manure. 2d year, wheat, and in autumn radish-seed, trefoil, or other forage. 3d year, Turkey wheat, or millet, &c. When the course extends to four years, it is, 1st year wheat, and in the autumn French beans mixed with Turkey wheat. 2d, Wheat, and lupins in autumn. 3d, Wheat, and forage in autumn. 4th, Turkey wheat, millet, &c. In Tuscany, two crops are produced in a year.

Many varieties of wheat are said to grow in Tuscany, of which the author thinks it would be useless to attempt a particular description: he therefore only observes, in general, that this grain is larger, rounder, and more opake than that of Geneva; and that the Tuscans are persuaded that the best of all wheat grows in their country. We know not how far this notion is justified: but it may be worth while, since we are apprized of the varieties which they possess, to procure parcels of them, in order to make experiments with them in our own country.

From a species of hard grain called *grano duro*, or *hard corn*, the paste which we call *Macaroni* is made. The process is particularly detailed in the present volume; as is also the manner of harvesting and of threshing out the grain. The day in which the latter operation is performed (for by collecting the whole vicinage together, it is completed in a single day) is a great holiday in Tuscany; they work hard and live well all the day, and dance all the night. After the corn is separated from the straw and the chaff, it is preserved in subterraneous excavations; which are curiously constructed, and are found to defend the corn from mildew and from insects.

M. SIMONDE observes that, as the traveller over the plains of Tuscany scarcely sees any cattle, he must wonder how the farmers procure such quantities of dung as are continually spred on their land: but the wonder will cease when he is informed that they keep the cattle constantly in the stable, in order that none of the dung may be lost. They are economists in the article of manure; and as they have nothing but fodder which must be cut for these animals, we do not reprobate this practice: but we cannot account for a fact which is related in this section, viz. that there is only a single bull kept in the whole province of the *Val de Nievole!*

The hedges or hedge-rows of this district are represented as extremely delightful; being composed of the white and black thorn, the sweet briar, evergreen rose, ilex, service-tree, honey-suckle, pomegranate, broad leafed myrtle, arbutus, bay-tree, the wood thyme, laurel, powdered broom, and virgin's bower.

The condition of the peasantry, with an account of which this part of the work concludes, is represented as various. Those farmers who hold their land on leases are, as can easily be believed, more industrious and substantial than those who cultivate their farms on the terms of sharing the produce with their landlords. This latter must be a wretched mode of tenure.—The domestics of the farmers, and their hired servants, are fed with the strictest economy. They have no meat except on Sundays. On other days, their meals are composed

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of Turkey wheat boiled, sallad, bread, French beans, or some other boiled pulse, seasoned with oil, and soup. Our English husbandmen, if they have not so luxuriant and prolific a soil to cultivate as that of the *Val de Nievole*, will not be disposed to envy the life of a Tuscan ploughman or herdsman: while, such is the power of habit, the Tuscan might be equally reluctant to exchange his pulse and oil for our fat bacon. Be this as it may; it is time for us to quit the plain, and to proceed to the second part of the work, which treats of

The *Hilly Region.*—Here M. SIMONDE commences with a picture of the scenery of the Tuscan hills, which we must endeavour to copy for the amusement of our readers: (p. 102.)

'The plains of all countries please the eye only by the richness and fertility which they display; and this kind of beauty belongs in an eminent degree to those of Tuscany. The hills, however, which elevate themselves around them, unite grace to richness, and display the treasures of the field only to heighten the charms of perspective. Plots of ground, raised on terraces one above another, appear as if they were inclosed in vine baskets. The grass every where assimilates itself with the wheat, and blends its soft verdure with the golden ears of corn. Olive trees shadow the banks, and vary the picture by their rounded shapes. If their sallow green be melancholy, yet variety renders it pleasing, and its pallid hue is compensated by their picturesque form and elegant lightness. The woods of chesnuts which crown the hills, and which sometimes cross them by following the course of the torrents, contrast agreeably with the olive by the brightness of their verdure, the extent of their branches, and the majesty of their form. In short, the numerous villages placed like eagles' nests between the rocks, or on the declivities of the little hills, and the habitations so thickly strewed as almost to cover them, animate the perspective, and give to the whole a truly picturesque effect.

'It is in an autumn evening, when lights glimmering from every part disclose the modest dwellings of the husband-men, concealed under trellises, or groupes of fruit-trees and olives; when flambeaux made of straw, gliding along the paths, mark the peasants gayly running to join their neighbours, and to spend their evenings together; when the round ridges of the mountains, tufted as it were with olive-trees, sketch their own out-line in a sky of the purest æther; that a view of these hills excites the most romantic ideas. A night in the month of June presents a very different prospect, more brilliant perhaps, though less animated. It is then that the *lucciole* or shining flies (*lampyris Italica, Linn.*) are most abundant, whose irregular flight, marked by streams of light at one time visible and at another time concealed, strikes and dazzles the eye. The mountains appear to be set with brilliant gems, the vallies to be lakes of light, and the whole country to be so electrified as to be giving out sparks at every point.

'The winter season, in which snow is altogether unknown, has also its beauties. The turf not only preserves its verdure, but is even

enamelled with flowers, some of which would not disgrace the garden; such as varieties of anemonies, every species of narcissus, hyacinths, hellebores, &c.; and the olive-trees do not appear to so much disadvantage as in the brilliant season of spring. The olive harvest also continues through the winter. This pleasing occupation contributes to render the peasantry during this season chearful and animated, and forms a scene very different from a wintry picture.'

The author subjoins to this landscape an avowal that its beauties are more particularly characteristic of the *Val de Nievole*, than of all parts of Tuscany in general. He then gives an account of the soil, culture, and productions, &c. of the Tuscan hills; which occupies, in the whole, twenty-nine sections of this part. He first discusses the nature of the olive-tree; and in speaking of the climate which suits it, he points out the essential differences between it and the vine. The manner of preserving the green olives, for the table, (which are gathered before the general crop is ripe) is particularly described, as well as the processes of gathering the olive crop and extracting the oil. They reckon, he tells us, in a good harvest, that a sack of olives will produce six flasks of oil, or 36 pounds of 12 ounces. It is objected to the cultivation of the olive-tree, however, that its produce is extremely uncertain; and M. SIMONDE discusses its operation on the wealth and population of the country. In years of abundance, the peasants have no economy, and in years of scarcity they have no resource; yet, he remarks, it must not be denied that the olive-tree is of some use to the country, because it makes the waste land productive, and covers some sterile regions with inhabitants which would be otherwise deserted. Advantages are commonly balanced by disadvantages: but here the defect seems to lie more in the government than in the uncertain produce of the olive plant. If the peasantry were encouraged to be provident, by a change in their miserable condition, regular habits would be formed, and years of abundance would compensate for those of scarcity.

Next follows the history of the Vine, in the propitious aspects of the Tuscan hills. The modes of planting, training, and pruning this valuable tree are fully described; and a catalogue is given of the several varieties of black and white grapes which this country produces. The great difference between the plains and the hills is that, while the best vines in the former yield only a miserable kind of grapes, the very worst in the latter, if cultivated in favourable exposures, will produce fruit which is delicious. The vintage, which commences at the end of September or the beginning of October, is conducted in Tuscany in the same manner as at Geneva. The Tuscans make very little white wine, but

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that little is from picked fruit, gathered before the general vintage *. All the remainder of the white grapes are mixed with the red.—In addition to the ordinary wines of this district, all the cultivators prepare a choice sort, which they term *vin de dessert*. Each family has a particular secret for making it; and into these mysteries the present author, though he lived some years in the country, was not initiated. After having stated the prices of different kinds of wines, he makes this general observation: 'While the vines of the hills of Tuscany enjoy an immense superiority over all those of the northern parts of Italy, they are not surpassed by any of those of the South. Yet the *Lachrymæ Christi* of Naples, and even the wines of Champagne, Burgundy, and Bourdeaux, are imported at a great expence into Florence: but it is owing to fashion, and to their scarcity, that they are so much in request.'

We must not only pass over the author's digression on the vineyards and wines of the Cisalpine, but must now dismiss, with more brevity than we could wish, the remaining topics which immediately relate to his proposed subject.

The fields on the Tuscan hills are cultivated with the spade: but the drought to which they are subject prevents the adoption of the same system of crops which prevails in the plains. 'I had thoughts (says M. SIMONDE) of making a trial on the borders of the *Val de Nievole*, of some of the English crops, as the radish and the annual grasses, such as are to be seen in the artificial meadows in France: but the disasters of the war prevented my experiments. It was impossible to adopt the English practice of depasturing cattle, on account of the steepness of the hills, and of the vines and olives which are scattered over them.'

The English agriculturist will be surprized to find, in the section which treats of the size of farms, that in Tuscany farms are generally less than many of our fields. In the hills of the *Val de Nievole*, farms vary in size from four to six coltras †, but the most usual extent is that of five coltras, or 193,270 square feet. Placed in the middle of this scrap of land, is a house for the peasant and his family; who have only one half of the harvest for their subsistence, as the other moiety is the property of the landlord. For a calculation of the produce of a farm of $5\frac{1}{4}$ coltras, or of 202,935 feet square, on the half of which a

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* To the juice of the white grape, the Italians do not give the name of *wine;* they call it *Trebbiano*, from the plant yielding the particular grape from which it is made.

† A *Coltra* is considerably less than an English statute acre, being only 38,654 square feet.

peasant

peasant with his family lived for thirty years, and brought up five sons and two daughters, we must refer to the work itself. However this account may stand, it will afford us no very favourable idea of the condition of the peasantry, who appear to be in a deplorable state; and the author may justly comment on the disadvantages of that mode of occupancy, by which the tenant covenants to share the harvest with his landlord.

This part of the work concludes with an enchanting delineation of one of these small farms, which the narrowness of our limits alone restrains us from extracting. It must be a little paradise!

An account of the *Mountains* constitutes the last division of this volume; and it is subdivided into seventeen sections. Here the author describes the culture of these regions, and the state of society among the mountaineers. It appears that the chesnut trees, which cover these elevated spots, form the chief riches of the inhabitants; the fruit, after having been dried on kilns or stoves, is ground into a kind of meal, of which sweet cakes are made; and these not only serve as food for themselves, but are sold as a luxury to the people of the plains.—The condition of these mountaineers is preferable to that of the other peasants, and their figure is strikingly beautiful.—To the sheep, the forests, and the fruits of the mountains, distinct sections are assigned by M. SIMONDE: but objects of more importance are the Manufactories, which are situated in their gorges: viz. those of paper, of silk, and of glass. Of the former it is observed; 'few manufactures contribute less to the prosperity of a nation than that of paper, because it does not encourage the production of any primary article, and does not lend its aid either to the arts or to agriculture, in replacing their capitals.' (p. 263.) The silk manufacture, however, is stated to be of importance to the country; and the author laments that the use of cotton should have so generally superseded it.

M. SIMONDE remarks with concern that the gentry abandon the country, and live wholly in the towns and cities; because their residence on their estates is necessary to the prosecution of agriculture with taste and with science, and to the removal of those evils under which it labours. As the country is thus deserted by the rich, it is scarcely necessary to repeat the former observation, that the art of gardening is scarcely known in Tuscany; though its climate, of all others, invites to the enjoyments of rural life. Even in the depth of winter, myrtles and pomegranates flourish; and in the middle of January the earth smiles, the fields look green, flowers blow, the birds are in full choir, and perfumes embalm the air. How much it is to be lamented that a country possessing such abundant charms,

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and capable of such infinite improvement, should be possessed by a people so insensible of its value!

Mr. Arthur Young having fallen into an error respecting the origin of the opulence of Italy, the present writer takes a view of its antient commerce; and while he wishes to promote agricultural improvements, he renders ample justice to trade, by evincing its importance to national energy and prosperity.

The Volume is concluded by an useful comparative table of monies, weights, and measures.

We cannot lay aside this work without thanking its ingenious author for the entertainment which he has afforded us. The people of Italy, and of the southern parts of France, may reap much profit from the numerous hints and observations which are here communicated; and though the hills of Britain are not clad either with vines or with olives, her sons partake of their produce by means of her extensive commerce, and will gladly receive the knowlege here conveyed respecting their cultivation. Let them benevolently wish in return, that this view of Tuscan agriculture may tend to produce some good effects on the people of that delightful country.

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ART. V. *Annales de Chimie*; i. e. Chemical Annals, Nos. 112—117. 8vo. Paris. 1801. Imported by De Boffe, London.

ACCIDENT prevented us from paying our usual attention to this work in our last Appendix: but we now resume our analysis at the point at which we broke off in the Appendix to our 34th Volume.

Report of M. M. Guyton and Vauquelin, concerning a Memoir of M. THENARD, *intitled, Observations on the Combination of the Tartareous Acid with the Salifiable Bases, and the Properties of the Salts which are thus formed.*——It has been long known that the Tartareous Acid has a great tendency to form triple combinations, of which we have examples in the Emetic Tartar and others. M. THENARD has considerably augmented the number of these combinations; and he has proved, by the experiments here reported, that the greater part of the Tartrites may be combined together, so as to produce simple salts which have peculiar properties. Some of these salts have two alkalies for a base, and others have an alkali and an earth, or an alkali and a metal, or an earth and a metal. It is also remarkable that, although the greater part of these bases can be separated by the alkalies from their simple combinations with the Tartareous Acid, yet they cannot thus be separated when they constitute triple salts.

Some

Some Reflections on the Difference of the Acetous and the Acetic Acids. By M. DABIT of Nantes.——In opposition to the opinion of M. *Adet*, this author concludes from his experiments, 1. That there is a difference between the acetous and acetic acids. 2dly, That this difference is owing to a larger proportion of oxygen in acetic acid than in acetous acid. 3dly, That the acetous acid may be converted into the acetic acid by an additional quantity of oxygen. 4th, That the acid is in the state of acetous acid in acetate of potash. 5th, That the acetic acid, obtained when this salt is decomposed by sulphuric acid, is owing to a portion of oxygen which the acetous acid takes from the latter.

Experiments on the Ashes of some Kinds of Wood. By M. PISSIS.——These experiments are intended chiefly to shew that, contrary to general opinion, a considerable quantity of potash may be obtained from the ashes of the white poplar.

Experiments on Platina. By M. PROUST.——In the first chapter of this memoir, the author enumerates the extraneous substances which are found mixed with Platina; these are quartzose and ferruginous sand, pyrites, gold, and quicksilver. Chap. 2. The sands may be separated mechanically (when spred abroad) by the blast of hand-bellows. Chap. 3. Gold, being frequently whitened by the quicksilver which is present, may be discovered by heating the Platina in a proper vessel. In chap. 4. the writer observes that Platina, in its natural or crude state, is in reality a sulphuret of the metal. In chap. 5. some experiments relative to the oxidation of the mineralized Platina are related. Chap. 6. contains an examination of the mineralized Platina by pure nitric acid:—which had no effect upon the Platina, and only separated the quicksilver from the gold that was present. Chap. 7. informs us that 400 grains of three different samples of the ore, or mineralized Platina, being separately treated with nitro-muriatic acid, left a residuum of a black substance in the following proportions:

Nos.	Grs.
1. —	10 ½
2. —	6
3. —	14

400 grains of what M. PROUST calls black ore of Platina left a residuum amounting to 7 grains: another sample left 9 grains: and a third left 3 grains. In chapter 8. these residua are proved to be graphite, or plumbago. The 9th and 10th chapters contain observations on the solutions of Platina. In the 11th are reported some experiments on what the author calls the black powder of Platina: from which he infers that a part

of the mineralized Platina is in the state of a phosphuret. Chap. 12. treats of the crystallization of the solutions of Platina. The 13th states that nitro-muriatic acid, composed of three parts of muriatic with one of nitric acid, is the best menstruum for dissolving Platina. The 14th treats of the utility which may be derived from the products obtained by distilling the solutions of Platina; and the 15th and last chapter relates some observations on the solutions of Platina made by nitro-muriatic acid, composed of nitric acid and common salt; the specific gravity of the nitric acid being 1,279.

In this Memoir, several remarkable facts are related, and we have only to regret the want of perspicuity in some parts of it. M. PROUST promises a continuation of these experiments.

Account of the Oil extracted from the Cornus Sanguinea of Linnæus. By M. MARGUERON.——From the experiments here related, it appears that this oil may be of use to the arts, and perhaps to medicine.

Memoir on the Acid Water of the Starch Makers. By M. VAUQUELIN.—It has long been known that the water, in which the starch makers macerate their flour, passes gradually into an acid state: but hitherto no attempt had been made to ascertain the nature of the acid. M. VAUQUELIN was therefore induced to perform various experiments on this liquor; and he states the composition of it to be as follows; 1. Acetous Acid. 2. Ammoniac. 3. Phosphate of Lime. 4. Animal Matter. 5. Alcohol. He observes that only one of these substances (namely phosphate of lime) was contained in the flour previously to fermentation, and that all the others are results of this natural process. He proposes it as a question, whether the acetous acid might not be separated with advantage to the manufacturers, since it certainly might be employed in white lead and similar preparations.

Experiments on the Reduction of Metals by Charcoal, on the Anomaly which this Process creates, and on the Discovery of a New Gas. ——These experiments were made under the direction of M. *Guyton*, in consequence of a paper written by Mr. Woodhouse of Pennsylvania, and published in the Medical Repository, under the title of " Observations on certain Objections of Dr. Joseph Priestley to the Antiphlogistic System of Chemistry." We do not deem it necessary to enter into an account of the experiments of the French chemists, because they have been anticipated by those of our ingenious countryman Mr. Cruickshank of Woolwich, which have been published in

No.

No. 50. of Mr. Nicholson's Journal, April 1, 1801. The experiments performed under the direction of M. *Guyton* were published in the 114th number of the *Annales de Chimie*, 30 Prairial; and consequently they did not appear in print until more than a month after those of Mr. Cruickshank.

Letter from M. DEYEUX, *to the Authors of the Annales de Chimie, giving an Account of a Gummy Substance contained in the Bulb of the Plant called Hyacinthus non Scriptus, discovered by M.* LEROUX.——This article does not at present require any farther notice than annunciation.

A Method by which Sugar may be separated from Honey. By M. CAVEZZALI.——Having clarified the honey, the author exposed it to a gentle heat in an earthen vessel, and added a quantity of pulverized egg-shells until all effervescence had ceased. Some time afterward, when the whole had remained undisturbed, a thick froth was formed, and was removed. The syrup being then put into a bottle, at the expiration of four months it afforded crystals of sugar; they were reddish, but this colour was removed by alcohol.

Remarks on Clarification. By M. PARMENTIER.——This paper contains some useful observations on the different modes and effects of filtration, &c.

Memoir on Bleaching the Paste of Paper. By M. LOYSEL.—— According to this account, it appears better to bleach the paste than the rags or cuttings: but, for the mode and apparatus, we must refer our readers to the plates of the work.

Analysis of the Waters of Plombières. By M. VAUQUELIN.—— From this Analysis, we find that one pound of the water contains the following proportions of matter:

	Grain.	
Carbonate of Soda	1	$\frac{1}{12}$
Sulphate of Soda	1	$\frac{1}{6}$
Muriate of Soda		$\frac{5}{8}$
Siliceous Earth		$\frac{2}{3}$
Carbonate of Lime		$\frac{1}{4}$
Animal Matter		$\frac{1}{2}$

Observations concerning the Action of Sulphate of Iron on Nitrous Gas. By M. BERTHOLLET.——M. *Humboldt* has asserted that Sulphate of Iron completely absorbs nitrous gas, and only separates the azotic gas which was simply mixed with it; and on this assumption he founded the whole of his eudiometrical system. In the present memoir, however, M. BERTHOLLET proves that this idea is erroneous, since nitrous gas is in fact

decomposed by water, by potash, by mercury with the assistance of the electrical spark, and by sulphate of iron; and that the azote, obtained when the latter is employed, did not exist in an uncombined state, but is a product resulting from the action of the sulphate of iron, which, to a certain degree, decomposes nitrous gas.

Experiments on the cold Combustion of the Gaseous Oxide of Carbon. By M. GUYTON.

Memoir on the Reduction of the white Oxide of Zinc by Charcoal, and on the Gaseous Oxide of Carbon which is thus produced. By M. M. DESORMES and CLEMENT.——The facts contained in these two memoirs, with some others in addition, having been discovered and made known in this country by Mr. Cruickshank of Woolwich, in a second paper published in Mr. Nicholson's Journal, (No. 55, September 1, 1801,) previously to the arrival of this number of the *Annales de Chimie* (115) in England, we think that it would be useless for us now to state the particulars.

New Galvanic Experiments. By M. M. FOURCROY, VAUQUELIN, and THENARD.——A pile was formed with plates, each of which was one square foot. The commotions and decomposition produced by this pile did not differ from one which was composed of small plates; excepting that the combustion of wires immediately took place with great violence; and when these were immersed in oxygen gas, they were burnt with a vivid light. The small plates, however numerous, did not produce this effect; and it seems, therefore, that combustion takes place according to a law relative to the *surface* of the plates, while the other phænomena are influenced by the *number*.

Notice of a new Method of whitening Linen for domestic Purposes. By M. CHAPTAL.——The detail of this method has been made known in a work intitled "*Essai sur le Blanchiment, par R. O'Reilly;*" and M. CHAPTAL, in this notice, states that M. BAWENS has fully proved the utility of it with respect to sheets and linen in general.

On the distilled Water of certain Plants said to be inodorous. By M. DELUNEL.——This author is of opinion, first, That it is erroneous to believe that the distilled waters of inodorous plants are not more efficacious than simple distilled water; and that their use in medicine will become more general and more valuable, by a comparison of the waters of the Vegetable Kingdom with those which are called Mineral. Secondly, That, by a pre-

a proper method of distilling the inodorous plants, we shall probably acquire many new and useful remedies.

Observations on the Means of ascertaining the Presence of Lead in Wine. By M. REINECKE.——This paper does not require to be particularly noticed, because the well known test of hydrogenated sulphuret of potash is employed; and the whole appears to be a matter of private concern between the author and some wine merchants.

On the Culture of the Saccharíferous Beet (Beta Vulgaris, Linn.) in France. By M. DE CASTILLON, of Berlin.——It is the object of the author of this paper, to shew that the Beet may be cultivated in soils which in other respects are of little use.

Notice concerning the Sebacic Acid. By M. THENARD.—— From the experiments here related, this author is of opinion that there exists in distilled fat, or lard, a peculiar acid; which, instead of being volatile, odorate, and pungent, is solid, devoid of smell, and fixed to a certain degree; that, besides this substance, acetous acid is produced; that the peculiar odour of distilled fat does not originate from the Sebacic acid, but probably from some parts of the fat converted into gas; that, by the processes described by *Crell* and others, only Muriatic and Acetous Acids can be obtained; and, consequently, that the real Sebacic Acid has hitherto been unknown, and, according to the present state of chemical science, must be regarded as a new Acid.

New Reflections on the Medicinal Wines. By M. PARMENTIER.——This paper may be consulted with some advantage by pharmaceutical chemists.

On some Properties of the Galvanic Apparatus. By M. M. BIOT and F. CUVIER.——From the experiments made by these gentlemen, they conclude, 1st, that the Galvanic apparatus, when in action, decomposes the atmospheric air, and absorbs part of its Oxygen. 2dly, That the Oxygen afforded by atmospheric air contributes to the action of the pile, but is not absolutely necessary to produce this action, since it also takes place *in vacuo.*

Observations on the Preparation of the Phosphates of Soda and Ammoniac. By M. THENARD.——After some preliminary experiments and remarks, this chemist states the process which he conceives to be the best and most œconomical for preparing the Phosphate of Soda. He then proceeds to observe that the Phosphate of Ammoniac frequently will not crystallize, in consequence of an excess of acid resulting from a partial decomposition

position of the salt caused by heat during evaporation. In such a case, the liquor, if found to be acid, must again be neutralized by ammoniac.

Experiments and Observations on the Colour which Lemon-juice communicates to Paper when heated. By Dr. CARRADORI DE PRATO.——It appears from these experiments, 1st, That this property is not peculiar to this acid, because verjuice, vinegar, the juices of *Oxalis Acetosella*, and of *Euphorbia Caracius*, &c. &c. produce the same effect. 2dly, That sugar possesses this property in an eminent degree. 3dly, That all the vegetable acids or juices, which contain sugar or saccharine mucus, also partake of this property more or less, according to the proportion of this substance. 4thly, That, when lemon juice is deprived of the saccharine mucus, it causes scarcely any change of colour on paper when heated. 5thly, That the above property, therefore, exclusively appertains to the sugar, or saccharine mucus, present in the vegetable acids and juices. 6thly, Dr. CARRADORI is of opinion that the effect is produced by a slight degree of combustion, which volatilizes part of the hydrogen of the sugar or saccharine mucus, and leaves the carbon exposed.

On the Strength of the Acids of Commerce. By M. DELATRE.——From the whole of this paper, the opinion of the author appears to be, 1st, That, in the weak muriatic acids, or those which are much diluted with water, the excess of the specific gravities in respect to water are nearly in proportion to the quantities of the gas dissolved in water, and consequently ascertain the strength of the acids by a direct proportion;—2d, The densities of the acid in water are greater in proportion as the quantity of it is smaller; that is to say, that the muriatic acid being always influenced by two affinities, viz. water and caloric, the first cannot be diminished by the progressive effect of saturation, without the re-establishment of the second; so that, in fact, the last portions of muriatic acid consist of gas interposed between the molecules of water.

Observations on Barytes and Strontites. By M. PAISSE.——This gentleman here gives an account of some experiments, from which he is induced to believe that caustic barytes and strontites cease to be caustic after exposure to a strong heat; he is therefore inclined to attribute this property to the nitric acid with which they had been previously combined; and he suspects that azote is the principle of causticity in many bodies.

A few other articles contained in these numbers we have been obliged to omit, in pursuance of our established regulation;

which, in general, only allows us to notice such papers as are original, and as suggest some practical remark, or may lead to farther useful investigations.

Hatch.

Art. VI. *Traité des Differences et des Series*, &c. i. e. A Treatise on Differences and Series, being a Supplement to the Treatise on the Differential and Integral Calculus. By B. S. F. La Croix. 4to. pp. 582. Paris. 1800. Imported by De Boffe, London.

The large work of M. La Croix on the Differential and Integral Calculus has been already noticed by us *. The present supplement is scarcely inferior in point of bulk to the preceding volumes; and if all *great books be great evils*, this author has terribly burthened the scientific world. Of such afflictions, who have a juster right to complain than Reviewers; who are compelled to cater for the public, to taste of every dish prepared for it, be it savoury or be it nauseous, and, in quest of truth and entertainment, sometimes to wander in the gloom of obscurity, and sometimes to be entangled in the mazes of sophistry?

After the specimens already offered to us, we needed no new proof of M. La Croix's indefatigable zeal and assiduity. So extensive a compilation as the one before us, indeed, we may venture to affirm, does not exist in any language; and in order to form it, almost all preceding Treatises, Transactions, &c. have been examined. Its matter is so various, so extensive, and so abstruse, that, instead of attempting an analysis, which at best must be imperfect, we shall briefly state the subjects treated, their order, and, with one or two particular observations, subjoin our opinion on the general merit of the work.

Chapter 1. treats on direct calculus of differences, and its application to the interpolation of series; on the inverse calculus of differences, relatively to explicit functions; on its application to the summation of series, and to the summation of series by interpolation; on the integration of equations of differences of two variables; on the nature of arbitrary quantities introduced by the integration of equations of differences, and on the construction of those quantities; on the multiplicity of integrals, of which equations of differences are susceptible; on the integration of equations of differences, consisting of three or more variable quantities; on the equations of condition relative to the integrability of functions of differences.

Chap. 2. contains the theory of series deduced from the consideration of generating functions.

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* See Appendixes to Vols. 31 & 32 N. S. of the Monthly Review.

Chap.

Chap. 3. gives the application of the integral calculus to the theory of series, and to their summation and interpolation; an investigation of the values of definite integrals, and of series proper to give the value of integrals that are functions of great numbers; an exposition of the uses of definite integrals to express functions given by differential equations, &c.

Chap. 4. on equations of mixed differences; here we have their analytical theory, and their application to geometrical questions.

Of all the information which books could afford, we have already observed, M. LA CROIX has availed himself; and it is certainly proper for an author to be acquainted with the labors of preceding writers on the subjects which he designs to discuss. In abstract science, however, this rule may be less strictly observed: indeed, it certainly *is* less strictly observed; and *D'Alembert* said that mathematicians were very little acquainted with mathematical works. As it is vain to expect perfection, very extensive reading, and much original invention, we wish that M. LA CROIX had devoted part of the time which he has spent in learning what others had thought and invented, in simplifying those theories which are perplexed and involved; and in rendering many demonstrations more direct and rigorous than they are found to be in his treatise. At the conclusion of our observations on his former production, we entered into a short discussion of the respective advantages of the fluxionary and the differential calculus; and by a note to the present work, we find that the author's opinion coincides with our own. He animadverts on the change of notation introduced by *La Grange* in his analytic functions, and in his treatise on the resolution of numerical equations; and certainly such a change appears to be unnecessary and incommodious. It is true that no alteration is made in the principles of a method by a difference in the notation: but it is desirable to relieve the mind in calculation; and there does not seem to be a more effectual way than that of simplifying the system of signs, by which the process of deduction is carried on. Whether the notations in the differential calculus be more commodious than in the fluxionary, can only be known by observing them in their application to different cases: such an application we have already made: but, although M. LA CROIX supports us in our opinion, yet we find not, in what he has said, any such confirmation as deserves to be particularly noticed.

The present treatise does not abound with very many acute reflections, nor with comprehensive views of the nature, progress, and possible future advancement of analytic science: yet it contains *some* which are worthy of notice, and which, amid the maze of analytical operations, tend to invigorate the tedious-

ness of calculation; as in pages 174. 460. 483, &c. We may therefore conclude, not that such reflections and views displeased M. LA CROIX when they occurred, but that they did not frequently present themselves *. If we may conjecture the turn of the author's mind from some passages in his former work, and from the general style of his composition, it is not such as would make him linger over demonstration, in order to render it more luminous or more exact: "If it were done, when 'tis done, then 'twere well it were done quickly †." The author appears to us to belong to that class of mathematicians, whom the facility of modern calculation has engendered: who are desirous "to operate rather than to know," and who look more to truth of result than to justness of inference. The ease by which modern analysis obtains its results is certainly, in our opinion, one of the causes which tended to the neglect of evidence and rigour of demonstration; and another cause is the disgust created by the foolish subtleties and vain refinements, into which certain metaphysical mathematicians have been betrayed: but why rush from one extreme to another? All examination of principle does not necessarily degenerate into unsatisfactory subtlety; nor does all discussion inevitably terminate in vain refinement. Because men striving to reason well have reasoned ill, are the rules of an exact logic to be thrown aside? Is there to be no weighing in the scrupulous scales of accurate metaphysics, because things are judged equal by the gross decision of sense? The cautions of those who tell us to beware of metaphysical subtleties are to be heard, indeed, but heard with suspicion; and some authors who, with politic regard to their own works, have warned their readers against the nice and curious examination of principles and methods, deserve no higher rank than that of "rude mechanicals" in science;—mere men of the loom and mill, who, if that which they put in comes out stuff and flour, care not by what means and contrivances the process has been conducted.

To express our judgment of this work more formally and succinctly is unnecessary; the parts of that judgment are mingled with our preceding observations; and we feel no wish either to add to them, or to take away from them. In a longer discussion, indeed, we could have done more ample justice to M. LA CROIX, and have afforded a more complete view of his treatise: but the frowns of a numerous class of readers check and forbid the frequency of extensive mathematical discussions; and, in an-

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* "*Non illi displicuisse jocos, sed non contigisse.*"

† Shakspeare's Macbeth, act 1. scene 7.

other

other part of this Appendix, we must pay our respects at some length to an important publication on the Calculus of Derivations, by M. ARBOGAST.

R. Wood....e.

ART. VII. *Histoire du Général Moreau*, &c. i. e. The History of General *Moreau*, to the Peace of Luneville; containing an Account of his Life, of his Campaigns on the Rhine and in Italy, with Anecdotes and Traits of that Greatness of Mind, Genius, and Bravery, by which he is characterized. 12mo. pp. 250. Paris. 1801. Imported by De Boffe, London.

IT is probable that the hero, who is the subject of these pages, is great only as a soldier, and that nothing relating to him in any other view deserves to be consigned to the press. Be this as it may, however, it is certain that the work before us contains little that respects him but as a soldier, though the title page led us to expect something more. To speak of him in this light;—it is the opinion of the best judges that he is the ablest General who has appeared in the late wars. He is said also to be modest, and a stranger to factions; and he manifested conduct interesting to humanity, and to the first personages in this country, when, in the face of the infernal decree of those monsters who composed the Committee of Public Safety, he ventured to save the garrison of Nieuport, consisting almost wholly of Hanoverians: for which indulgence he would have answered with his life, had not those wretches, in the mean time, paid the forfeit of their crimes.

Victor Moreau, we are here told, was born at Morlaix in 1763; and studied law at Rennes, where he was admitted to the degree of advocate. The writer says that he will not stop to detail the particulars of *Moreau*'s infancy,. nor those of his youth; because, as they possess no superior interest, they cannot enhance his merit, nor impart any new lustre to his history. When his department raised a battalion, the interest of *Petiet*, since minister of war, and now counsellor of state, gained for him the appointment of its commander. His rise was afterward rapid; till, in the year IV. he was made General in chief of the army of the Rhine and Moselle, at which period the present history commences its details. It would have been interesting to have given us some insight into the mode by which *Moreau*, after the age of manhood, so speedily made himself master of a new art, wholly distinct from his former pursuits: but no such information here occurs. We say *master of a new art*, because of all the French Generals of the present day, he is allowed to possess the most *military science*; and not to have succeeded solely by the powers of *genius*, and the assistance of

adventitious circumstances. The work forms, however, a neat, and, we believe, an accurate recapitulation of the operations conducted by this celebrated officer; and it will be read with pleasure and instruction by persons who are skilled in military science, and in the geography of the countries which were the theatres of action.

Having detailed *Moreau*'s atchievements in his march from Manheim to Munich, the author adds; 'we are now to see him run a career more difficult and more perilous. Every where surrounded by enemies, and exposed to the greatest dangers, he commenced his famous retreat; which is not less admirable on account of the firmness of the soldiers, than the genius of the chief who directed it, and which will be quoted in all ages as a real prodigy.'—'The attention of Europe was fixed on this brave army, and its General; and the enemy reckoned on its certain capitulation: while *Moreau*, by scientific combinations, by his address in drawing the utmost advantage from the excellent dispositions of his troops, and their undaunted courage, disappointed their expectations, and maintained and augmented his own fame. After a march of a hundred leagues, amid a thousand difficulties, covered with glorious trophies and brilliant victories, which rank this retreat among the most brilliant operations of which history makes mention, he conducted his army to the frontiers.'

A very interesting detail of the siege of Kehl is next inserted. It is here said that the brave resistance made by *Moreau* and *Dessaix*, in this fortress, occasioned the surrender of *Mantua*: certainly, *Dessaix*'s address in obtaining terms is not less admirable than his bravery in defending the place. The French were allowed a certain time to remove whatever they chose; and their alacrity and activity on this occasion, considering the hardships of the siege which they had undergone, appear wonderful. They left nothing behind them except the bare walls, but carried away every thing; even the palisades, and the balls which the enemy had thrown; and the Austrians who observed them were lost in astonishment, while the French openly said to them, in German, *we will not leave thee a nail.*

The author informs us that *Bonaparte* and *Moreau* had never met, till after the return of the former from Egypt; that they received each other with frankness, and testified great reciprocal esteem; that they were above all jealousy; and that *Moreau* entered fully into the measures of the *dix-huit Brumaire*. The writer says nothing respecting the coolness which is reported (perhaps falsely) to have since taken place, between these two conspicuous characters.

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A portrait of *Moreau* is prefixed to this little work. It presents a countenance not altogether very prepossessing, but indicative of thought and of talents. We know not whether it can claim the merit of accurate resemblance. Jo.

Art. VIII. *Pouvoir Legislatif*, &c. i. e. On Legislative Power under Charlemagne. By M. Bonnaire de Pronville. 8vo. 2 Vols. pp. 200 in each. Brunswick. 1800. Imported by Dulau and Co. London. Price 10s. 6d. sewed.

The authors of the Helvetic Revolutions of the fourteenth century, as we learn from Mr. Planta's excellent History*, founded their claims on prescription: the champions of the people in England, at a later period, proceeded on similar grounds; and even the more early of the French assertors of the popular cause did not disdain to press antiquity into their service, to set up a sort of *hereditary* right to liberty, and to deduce a kind of legal title to certain political prerogatives, from the records and memorials of remote times. Hence they made themselves the descendants of those Germans, whose liberties the matchless pencil of Tacitus has sketched. The courts and synods of the Merovingian and Carlovingian kings were described as legislative senates; the commonalty was represented as raised to a share in the legislation, by the House of Pepin; and the monarchs were said to be absolute at the head of the army, but under the controul of law as civil chiefs.

M. de Pronville (who, we think, appears to have been bred a lawyer, and was perhaps a member of parliament under the *ancien regîme*,) regards all this as "the baseless fabric of a vision," conjured up for the purposes of innovation, and originating rather *in malâ fide*, than in ignorance and self delusion. The professed object of the present work, therefore, is to strip off the mask from these artificers of revolutions, by detecting their misrepresentations, exposing their errors, refuting their conclusions, and putting the world in possession of the real facts. He disclaims, on the part of the Franks, any affinity to the free tribes of the Roman historian; and he thinks that the assemblies, with which we see the kings of the first and second race so often act, were merely called together to render an account of their administrations, to give information to the monarch respecting the state of his dominions, to listen to his reprehensions and admonitions, to learn his future pleasure, to be made sensible of their subject condition, to repledge their fealty, and to serve as pageants to reflect lustre on the court of

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* See M. R. Vol. xxxii. N. S.

their prince; who was the sole depository of all authority, as well legislative as executive.

If, when reading *Boulainvilliers*, *Dubos*, and *Mably*, we readily accede to the remark that neither mere literati nor mere lawyers are competent to inquiries of the nature of that which is here proposed, we shall not be less of that opinion after a perusal of this author; whom we consider as chargeable with faults which inveterate legal habits alone can excuse. He is not deficient in either learning or ability: but of what use are these qualifications to a partisan? They enable him only to plunge himself deeper into error, and to mislead others more successfully. Though most of the points discussed in these pages, *mutatis mutandis*, have been very ably sifted in our own country; particularly by the advocates of the Tory side, who, both as to learning and the strength of their positions, had a decided superiority over their Whig antagonists; yet the observing reader will occasionally discover particulars of great interest, tending to illustrate the neglected subject of our own legal antiquities.

M. DE PRONVILLE briefly considers the situation of affairs under the Merovingians, as it affects the question which he discusses. The code of one of the Merovingian kings is thus prefaced; "*Hoc decretum est apud regem & principes ejus, & apud cunctum populum christianum qui infra regnum Merovingiorum consistunt.*" This passage, taken in its more obvious sense, in the present writer's estimation, ill accords with a limited monarchy. His comments on it will be easily guessed by the readers of our Brady.

The title of the salic law in the documents of this period, *pactus legis salicæ*, is grating to this Antiquary. A pact supposes two parties, who treat on equal terms, and who must severally concur in order to give the pact force:—how is this to be reconciled with the *absolute legislative power* of Clovis and his descendants? Such phraseology must be displeasing to our fashionable politicians, the impugners of the social compact; who release governors from the annoyance of inconvenient restraints, by complaisantly allowing to them the wide range of *utility* and *general good*: but, for their gratification, we shall copy the ingenious and learned solution of the difficulty which the present author has borrowed from Hertius. 'The term *pactus* appears to be derived from the German word *pack*, *packen*; so that, in bad Teutonic, *pack du droit salique*,—in bad Latin, *pactus legis salicæ*,—and in the language of the bar, *corps* or *code du droit salique*,—are terms perfectly synonymous.' The reader may feel anxious for the second term, lest it should undergo the torture to which the first has been subjected; for why should *lex* be more favoured than *pactus*? The turn of *lex* is not yet come: but,

but, anon, we shall see it pass the alembic. There is no objection to it here in its usual sense.—After this, need the present writer, this Alexander in criticism, dread any hostile passage which old records may contain?—M. DE P. is not very complaisant to his adversaries. He complains that they reason inconclusively, express themselves equivocally, wilfully confound times and occasions, place an usage within one period which belongs to a different one, represent facts which happened under one reign as falling under another, set up the exception as the rule, reduce the rule to an exception, blend together things between which there is no sort of relation, and, by these practices, support such inferences as best answer their purposes. That charges of this nature may lie against many who build hypotheses on antient facts, we fully admit: but whether they apply in any degree to this author himself, we shall not presume to decide.

According to M. DE P. the word *champ* of old meant not *field* but *camp*, and the assemblies of the *Champ de Mars* and the *Champ de Mai* dwindle into mere military assemblages preparatory to the campaign, where no civil councils whatever were holden. The councils, in which the laws were promulgated, were not holden in fields, but in the royal palaces; and no capitulary, one excepted, bears the date of either March or May.—It must be admitted that he adduces very strong proofs to shew that the term *populus* was used to express councils, to which none but the immediate vassals of the crown were admitted: but in this controversy, the English reader will find only what he has seen asserted by Brady, and adopted by Hume.—Capitularies, we are told, were issued in years in which history makes no mention of any council or *placitum* being holden.

Hincmar's celebrated letter, about which the present author makes so great a shew of candour, suggests (in our opinion) conclusions very different from those for which he contends. The powers, we grant, were not nicely balanced: but we think that it might be shewn, from this document, that the higher magistrates and vassals had a voice in the legislation; that the inferior magistrates, and persons of consideration, (the *prud-hommes*) had an influence over it; and that, if there was not a regular *tiers état*, still the popular voice was not without weight. The venerable prelate's epistle, here quoted, would furnish an excellent text for a comment, in which might be very aptly discussed all the points of the controversy revived by M. DE PRONVILLE.

Another text, which calls forth the zeal and exercises the ingenuity of this writer, is the capitulary of 819. "*Vult Dominus*

minus Imperator ut in tale placitum quale ille nunc jusserit, veniat unusquisque comes, & adducat secum duodecim scabinos, si tanti fuerint; sin autem de melioribus hominibus illius comitatus suppleat numerum duodenarium, & advocati tam episcoporum, abbatum, & abbatissarum ut eis veniant."—Without laying undue stress on this extract, we may safely say that it can hardly be reconciled to that utter exclusion of popular interference in legislation, for which a certain faction has contended.

Much learning is thrown away by M. DE P. when he argues the improbability that so politic a monarch as Charlemagne would remit any part of his prerogative, in favour of the nobles and higher clergy. It has never been asserted that he did. What the Abbé de *Mably* maintained was, that he raised the commonalty to a share in legislation; and this is perfectly compatible with the jealousy which he is said to have entertained, with respect to the two higher orders of his subjects. The Merovingians, we are told, did not avail themselves of the wise example set by Constantine, not to invest the same man with the chief civil and military power in a province: but, in opposition to it, they put both swords into one hand. They were not long, however, in discovering the impolicy of this conduct; and they endeavoured to repair its ill effects by obliging these chiefs to pay them, on all occasions, the most abject obeisance: they took their eldest sons to their courts, under the pretence of educating them, but in fact to hold them as hostages; they constituted themselves their guardians, if the father died, and seized the profits of their tenures; and they made it a rule never to confer on the son the dignity which his father had enjoyed. All these precautions, it is said, were barely sufficient to keep these sturdy chieftains in subjection.

M. DE P. enters also into a very profound disquisition on the classes of the capitularies, and the titles which they bear; stating the times at which they were collected, and by whom. He would have rendered his account less faulty, had he seen the valuable posthumous work of President *Hénault*, lately published. (See our last Appendix).

On considering attentively the author's mode of arguing in his fifth chapter, we are convinced that he would be able to shew, from the varying phraseology of our antient statutes, from the composition of them, and from the terms applied to the King, the Lords, and the Commons, that the legislative power rests solely in the British monarch:—supposing him to have no other light than what is to be drawn from the statute book itself.

We are next favoured with learned criticisms on the term *lex*; which, says the author, is employed to signify *usages*, *tribunal*, and

and *fine*; and in this assertion he is undoubtedly founded. He then explains the difference between capitularies and capitulary laws.—The nineteenth chapter of the third capitulary of 803 now comes under consideration; in which these words occur: "*Ut populus interrogetur de capitulis quæ in lege nostra addita sunt, & postquam omnes consenserunt, subscriptiones & manufirmationes suas in ipsis capitulis faciant.*"—*Ut populus interrogetur, omnes consenserint, subscriptiones faciant*;—these words sound oddly, but they are made to bend to the author's hypothesis. The word *interrogetur* means a sort of daring; and the word *consenserint* signifies unqualified submission! Will any man, except a member of the *çidevant* parliaments, now presume to say that he understands the meaning of words used in antient documents?

From the zealous efforts which M. DE PRONVILLE makes to exclude the nobles and the people from all share in legislation; from the horror which the notion seems to excite in him; and from the following passage, which he quotes with approbation, we may form a fair guess what was meant by a *good subject* under the *ancien regîme*,—the failure of the restoration of which was, on a late great occasion, so eloquently bewailed. It is the Emperor Basil who thus speaks, at the eighth council of Constantinople: "With regard to you, laics, whether you are invested with dignities, or are private men, it is not permitted to you to dispute on ecclesiastical subjects; that belongs only to the bishops. Whatever science, whatever virtue, a laic possesses, he is but a sheep: however slender may be the merit of a bishop, he is always shepherd, while he teaches the truth. Beware of judging your judges, and live in submission."

The author's criticism on a passage taken from the edict of Pistes, on which great stress has been laid, is not less satisfactory than it is learned and ingenious; and we regret that our limits will not permit us to state it.

M. DE P. supports his positions on the ground of the incapacity of the Nobles to form any check on the royal power, on their fiefs being for life, on the royal right of succession to their moveables, on that of wardship, and on that of disposing of their children in marriage. An assembly of men thus circumstanced, we are told, would be ill adapted to constitute a branch of a legislature.—We shall only observe that the argument holds equally against our antient House of Lords.

We seldom receive from the continent a work so well printed, and on such fine paper, as are these volumes; which reflect much credit on the press of M. *Fauche*, of Brunswick. Jo.

ART.

ART. IX. *Essais Historiques sur les Causes & les Effets de la Revolution de France*, &c. i. e. Historical Essays on the Causes and Effects of the Revolution in France, &c. By C. F. BEAULIEU. 8vo. 2 Vols. pp. 500 each. Paris. 1801. Imported by De Boffe, London. Price 14s. sewed.

THE reader of these historical essays will find the great events of the French Revolution described by an able hand; he will perceive that several matters, which were before obscure, are here cleared up; and he will with pleasure follow the author in his details of some interesting points, over which other writers have passed without any, or with slight notice. In an extensive introduction, M. BEAULIEU exhibits to our view the different revolutionary scenes, in colours deeply, but we cannot say too deeply shaded; hence his bias becomes visible; and it will be difficult for his readers to abstain from partaking of it. A perception of this bias, therefore, awakened our caution, and occasioned us to proceed with more than ordinary vigilance. The awful visitation, perhaps not yet finally closed, is too recent to be surveyed with due coolness and treated with perfect impartiality, even by spectators; how, then, can it be thus contemplated by its immediate objects, by those who suffered from the deadly hatred of the most odious and contemptible of the instruments employed! On farther acquaintance, however, with the present writer, we discovered that he was a man of a naturally well balanced mind, and correct feelings; claiming only those allowances which the best nature in the same circumstances would require. Though he gives very decided opinions on abstract questions, and speaks strongly respecting measures, he neither undervalues the talents nor impeaches the worth of men because events have shewn them to have been deceived, or to have been unfortunate. The characters of *Necker*, *Lafayette*, *Mirabeau*, and *Barnave*, were perhaps never more justly appreciated than in these pages, where most of their proceedings are censured; and where also a very correct account is given of the ill fated monarch himself: who certainly possessed very laudable and virtuous dispositions, but who wanted the firmness and energy which alone could call them into vigorous and effectual operation. Never was a prince thrown on perilous times, so ill qualified to brave them!

To return to the Introduction. The considerations which militate against the subversion of antient institutions are here stated in a manner which reflects much credit on the writer, and which intitles them to the utmost attention. The fabric, against the demolition of which he vehemently inveighs, he yet owns was tottering; and he admits that the succession of ages,

which

which had rendered it venerable, had rendered it also crazy. Speaking even as its advocate, he tells us that its downfall was prepared by the freezing poverty resulting from the extravagant enterprizes of Louis the XIVth, by the inconsistent measures of the regent, by the destructive projects of *Law*, by the infamy of the latter years of Louis the XVth, (by which not only the individual suffered, but the monarchy itself, and particularly the next and last successor to it,) by the decay in the honour of the order of nobles, by the parties into which it had split, by the sale of titles, by the irreligion of the higher and the dissatisfaction of the lower ecclesiastics, by the corrupt conduct of the tribunals, by the hostility of the mercantile body, by the disaffection of the Protestants, by an irreligious and levelling philosophy, which had gained the ascendancy in the capital and in the great cities of the country, and by the financial derangements, which obliged the government to call a meeting of the States General. The *Cahiers* even of the nobles and clergy instructed their deputies, among other things, *to establish a good constitution:* its necessity seems to have been felt by, and to have actuated, the sound and respectable part of the French public; and the most moderate were willing to proceed to lengths which would now stagger the most ardent. If we would judge fairly of the men and the measures, we must place ourselves in *their* situations; and without doing this, we cannot appreciate justly the great event in which they were concerned: —an event which, in its first stages, forcibly attracted the attention of the curious; and from which they still find it difficult to withdraw their regards: while the professed politician is obliged to study it, because the present hangs on the past, and the politics of Europe can be investigated only through the horrors, the caprices, and all the strange scenes, of which Paris has been the theatre. Though the result of the labours of the first assembly deserves little respect, yet, in the course of them, numerous questions in political science underwent the most able discussions. By the struggles of parties, during the several periods of the grand concussion, abundant instruction is furnished, and we are strikingly taught what the circle of a revolution is. It originates in real weighty grievances; wise and good men commence the work of removing those evils; they are pushed farther by events than they intended to go; they then resign their places to men of less delicacy; and these are succeeded by persons still worse; till, at length, the ascendancy rests with those who are the least under the restraints of honor, conscience, and humanity: when the people, in the end perceiving that they cannot use their power but to their own prejudice, are glad to exchange anarchy for despotism, and willingly

willingly resign themselves to any master who is powerful enough to enforce obedience and subjection.—Such is the difficulty attending the amelioration of mankind!

The essays before us commence with the usual topics; the detestable policy of old *Maurepas*, the imprudence and extravagance of *Calonne*, the presumption and utter incompetence of the atheistical Cardinal, the career of *Necker*, the struggle with the parliament, the troubles of Brittany and Dauphiny, and the discontent of the Duke of *Orleans*, on account of the Queen's interference to prevent his having the reversion of the place of Grand Admiral, and her breaking off the promised marriage of his daughter with the Duc *d'Angoulême*. The author next treats on the meeting of the dread assembly of the States General, which took place on the fifth of May 1789; on the contests which arose between the *tiers-état* and the nobles, concerning the mode of voting; and on the final complete triumph of the former.—It is a circumstance of a most extraordinary nature, that the king favoured and sanctioned the two measures which gave to the assembly its peculiar character, and which enabled it to act a revolutionary part; namely, the double representation of the *tiers-état*, and the voting not by orders but in one assembly. It also appears that, influenced by *Necker*, his Majesty had agreed to adopt and support a constitution formed on the principles of the British system.

The author's account of the description of persons, who constituted this celebrated assembly, will probably be interesting to our readers.—The States General, he says, were composed, 1st, of 48 archbishops and bishops, 35 abbés or canons, and 208 curés, for the Clergy; 2dly, 242 persons of rank, among whom were many peers, a great number of the heads of the first families of the kingdom, and 28 of the judges of the sovereign courts, for the Nobles; and 3dly, the third estate counted 2 bishops, 12 persons of rank, 18 mayors or consuls, 162 magistrates, 210 advocates, 16 physicians, and 166 merchants and cultivators; all persons of consideration in their respective stations, possessed of talents and character, and such as the author calls *the chosen of the French*. He then proceeds to observe, 'yet these were the men who commenced the overthrow of their country! what could have been their motive in preparing this destruction? They all hazarded their lives, a great number risked high dignities, and almost all staked considerable fortunes.' He ascribes this conduct to the assembly being too numerous, to the preponderance of the *tiers-état* and the inferior ecclesiastics, and to the progress which a levelling spirit had for some time been making.—The solution of the author's problem may, in our opinion, be deduced from the

visionary spirit of the more effective part of the assembly, viz. such men of high character and influence as *Larochefoucauld*, *Lafayette*, *D'Aiguillon*, the *Lameths*, and *Barnave*; from the pride of the aristocratic party, which made it yield to passion rather than bend to circumstances; from the secession of many of its members; from the refusal of those who remained, to co-operate with the moderate revolutionists, in opposition to the demagogues; from the death of *Mirabeau*; from the untimely dissolution of the assembly, before a trial had been given to the new constitution; and from the decree of the noneligibility of its members into the new assembly. The machinations of the Orleans faction also form a cause, the force of which has not hitherto been fully ascertained.

M. BEAULIEU's description of the triumphs of the assembly at the *Jeu de Paume*, and at the conclusion of the *Séance Royale*, —of the critical situation into which its subsequent bold conduct brought it,—and of the firm establishment of its power in consequence of the events of the fourteenth of July, will be read with considerable interest.

A singular phænomenon now presents itself! An omnipotent assembly, clothed with every attribute which imposed respect, and intrusted with the sacred deposit of the future destinies of its country! What a career for wisdom, moderation, and unanimity, could beings possessed of such attributes have been found!—We have already enumerated the principal causes which, in our judgment, occasioned the disappointment of the world; and which led the way to the miseries that followed.

After the memorable fourteenth of July, we are told, all the great personages, who had combined their efforts to dissolve the assembly, saw themselves without hope; in the state of things about to take place, they could only look forwards to mortifications, and perhaps to greater calamities; they felt themselves without consideration, without influence, in a court dependent on new men, whom they had hitherto beholden at an immense distance from them; and their imagination revolted from the thought of remaining in such a situation. Swayed by selfish feelings, and influenced by fear, they resolved to quit France; which, in its novel situation, they could not endure as a residence. Such were the motives which determined the first emigration; while more solid reasons gave rise to subsequent desertions. The Comte *d'Artois*, on whose head a price had been set, could escape only in the dead of night, and under a strong escort; the Prince of *Condé* was saved by the fleetness of his horses; while the Prince of *Conti*, less observed and less feared, met with no obstacle in his way to the frontiers.

(P. 565,

(P. 565, Vol. 1.) A very entertaining part of this work respects the public journals; the characters of which, and of their authors, are drawn with great neatness and fairness. We shall notice one only, named *le Point du Jour*, of which the famous *Barrère* was the editor; which gave an analysis of the debates of the assembly, ably executed; and which was conducted in a manner highly decorous, and every way respectable. Although a partisan of the revolution, the editor never addressed his adversaries with rudeness; his journal was even remarkable for the most profound respect for the king, whose virtues it never failed to celebrate on every opportunity that offered: in one word, adds M. BEAULIEU, it must be incredible, except to those who knew the identity of the persons, that the *Barrère* of 1789 was the *Barrère* of 1793. To us this appears no way extraordinary. This prostitute orator is only a copy; the original existed in this country, and is famed in song. *Barrère* has been always loyal to the ruling power, whether that power resided in Louis XVI, *Robespierre*, or *Bonaparte*; and we may venture to say that "*whatsoever king shall reign*," he will find in gentle *Barrère* a most dutiful subject. We do not recollect him in the train of *Brissot*, because *Brissot*'s throne was never firm.

The revolutionary chiefs of this period appear to have resembled too many other political leaders, in thinking that, when the end is good, scruples respecting the means are not to be indulged. Hence, some instigated and all connived at insurrections, by which many lost their lives, and great numbers were deprived of their habitations and their property. *Lally Tollendal*, *Clermont Tonnerre*, *Mounier*, and *Malouet*, to their eternal honor, reprobated these enormities, and held them up to the notice of the assembly: but the assembly, to its everlasting disgrace, took no steps to repress them; and men, to whom until that period no stain belonged, were on those occasions mute:—they have since paid the forfeit of their criminal silence.

A plan of constitution, modelled on that of England, was a favorite idea with many politicians. The following is a summary of the arguments used against it.—"In England, (it was said,) the Nobles are not numerous; they are magistrates with fixed functions; nobility is confined to the heads of each family, and draws not after it the political consequences which result from its existence in France. The national will is complete without it; and the people, far from being regarded as a third, or a half, form a whole by themselves. If we are to imitate the English, we must reduce our forty thousand noble

families to two hundred individuals; and we must annihilate the moral and political effect of the nobility, by rendering it transmissible only to the eldest son: let us form of it an assembly of dignitaries, but we cannot regard it as a fraction of the national assembly.'

In detailing the extraordinary proceedings of the fourth of August, M. BEAULIEU insinuates that the mighty senators were more than *metaphorically* intoxicated. In the course of that night, all the feodal rents, dominations, and privileges, were swept away by decrees, moved and urged by the first nobles;—men to whom the largest share of them belonged;—so that nothing was left to distinguish the members of this lofty order from the commons, but their titles, which had already dwindled into mere shadows, and which were soon to undergo the fate of the substance. *Mirabeau* insinuated, at the time, that this sacrifice originated in a motive very different from patriotism; namely, in a desire of bringing the assembly and its proceedings into disgrace, in the hope of overturning its authority, and re-establishing the former order of things.—These measures raised a body of new enemies to the assembly, and new plots for its overthrow were invented; which, in the end, served to strengthen its authority, and to render still more impotent the tottering monarchy. M. BEAULIEU is too manly to deny the object of the feast given to the *Gardes-du-corps* on the 23d of September: but he justifies the principle, though he does not assert the prudence of that measure. The fermentation which this fatal repast occasioned, the horrors which the day and night of the fifth of October produced, and the commencement of the king's captivity on the following day, are events too memorable to be soon forgotten. The author is fully satisfied that the Duke of Orleans and *Mirabeau* were concerned in these transactions.

We regret that our limits will not permit us to take particular notice of the writer's excellent remarks on the conduct observed towards the clergy, on the issue of assignats, and on various other topics: but we must copy the following picture of France, in the year 1790, which will shew many persons how much they were deceived respecting the situation of the country at that time.

'The whole nation was in an agitated state; following the example of a King who had almost ceased to exist, it takes the oath to a constitution which was not in being; it swears to be free, and torments itself every way by persecution and self-oppression. Freedom of opinion and even of action was the universal cry, while they were all abusing and fighting each other on account of opinions; and actions the most indifferent were construed into state crimes. Military subordination was denounced as a system of aristocracy; all the national

forces by land and by sea were in a state of revolt, either dismissing or murdering the commanders; the garrisons were without soldiers, and the fleets without sailors; the whole nation was in arms, though Europe was at peace; and the government alone was without authority. The religion of the kingdom was now only a lamentable schism; priests joined the persecutors of priests, to rob, to despoil, to exterminate their own order: delirium reigned in every brain, and the flames of hatred were kindled in every bosom. In one place, they arm to defend the constitution; in another to destroy it.—Every thing is overturned; all regulations are violated; and even the precious metals disappear, and their place was supplied by frivolous paper money, which was calculated to dissolve all social bonds.'

At one period, the National Assembly appeared powerful and independent, like the senate of Rome in the days of the Scipios. Here *Mirabeau* found scope for the display of all his talents, and an opportunity of satiating at once his love of vengeance and his love of glory; here his eloquence laid prostrate the first European monarchy, and annihilated the proudest aristocracy which the world ever knew; here the orator braved the factions which were his former instruments, dissolved as by a charm the resistless hordes which had vowed his destruction, and caused the weapons to fall to the ground from the hands which were prepared to assassinate him. It has been very justly said that he ought to have lived longer, or never to have lived at all. The loss which France suffered, on the death of *Mirabeau*, is not to be estimated; for, looking forwards to the calamities which actually happened, of him it might be said,

"*Si Pergama dextrâ*
Defendi possent, etiam hâc defensa fuissent."

Because we thus do justice to the gigantic abilities of this singular man, to the influence which he thence obtained over the fate of the revolution, and to the worthier designs which he cherished near the close of his career, let it not be imagined that we wish to disguise his immoralities and his vices, which, unfortunately, were not inferior to his talents. We shall conclude this article with the able summary of his character, which we find in the work before us.—Having come to an understanding with the king, the author says,

'*Mirabeau* daily redoubled his activity at the assembly, and among the Jacobins; and every where he opposed himself to the storm. *I will combat the factions*, said he, in the tribune of that club, *among whatever party, and under whatever form they appear.* It was at this time that he was carried off by a violent malady, in the full vigour of life, having scarcely reached the age of forty. It was said that he was poisoned, and many persons still believe it: but this fact never has been, nor ever will be proved; his body was opened, and the faculty declared that they found no trace of poison. Those, who do not

not ascribe his death to a revolutionary cause, consider it as occasioned by his excessive debaucheries.

'This man was, beyond dispute, one of the most extraordinary personages of the latter part of the eighteenth century. In the violence of his passions, which were all extreme in him, and not in baseness of heart, are we to look for the sources of his vices. He had a father extremely harsh, who tyrannized over his haughty character; formed for independence, he rebelled against this father; the authority of the king was employed to persecute him, and he swore to destroy that authority if ever an opportunity should offer. The nobles imprudently rejected him from their class, and he put himself at the head of the *tiers-état* to overthrow the order of nobility; which he hated not in itself, for he was fond of his title of *Comte*, which he never omitted in his signature. At the beginning of the revolution, he offered his services to the king: but M. *Necker*, a little too scrupulous in his ideas of morality, when a critical question in politics was in agitation, caused the offer to be rejected in a humiliating manner: he therefore brought *Necker* to the ground, and inflicted the most terrible blows on the royal power. *Mirabeau* was a demagogue from vengeance, and a royalist in principle; revolutionary through ambition, and a conspirator in order to save his own life. Like all those men who have been the victims of arbitrary power, liberty was the object of his adoration; like all those who are torn by violent affections, and who are not restrained by religion, he sought every species of enjoyment, exhausted all the powers of gratification, and tarnished the glory of his great talents, by ministering to the caprices of his passions.

'With a temperament and a soul of fire, he had the eye of an eagle, and a countenance horribly scarred; his voice was strong and sonorous, and he had the power of regulating its inflexions in the most expressive manner. It is impossible to conceive the force which this address in declaiming gave to his speeches; and those only who heard them can form a just idea of it. In private society, he was extremely amiable; he played like a child with his friends, whom he truly loved, and who were most sincerely attached to him. His conversation was full of pleasantness and gaiety. He would joke with those around him, even in the assembly, play them tricks while he was listening to what was said in the tribune, and then suddenly he was seen to rise, to assume his commanding attitude, and to give a turn to the most important deliberation. Disgusted with the revolutionists of the assembly, whose violence knew no bounds, he threw himself into the arms of the king; and it appears that he received considerable sums from his majesty, in reward for the services which he was to render *.

'The public had no sooner heard of *Mirabeau*'s death, than uneasiness was every where diffused; multitudes surrounded his house;

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* The Author tells us, in another place, that the terms which *Mirabeau* made with the Court were highly favorable to the people; and that he would serve the king on no other condition, than that of his majesty consenting to support a free government.

alarm sat on every countenance; it seemed as if France had just lost the only man who could save the country: it might be said that his death was to him a genuine triumph, for he bore with him the regret of all parties; and it is remarkable that those, whose power he had destroyed, most deeply lamented his loss. The whole assembly attended his truly magnificent obsequies, and unanimously decreed to him that sort of apotheosis which lay within its power. I was witness to this deliberation; which the *right side* * supported with at least as much zeal as the *left* †. These honors were publicly and spontaneously bestowed; and history ought to record that *Mirabeau*, whose character was nothing less than faultless, was carried to the pantheon by priests and by infidels, by the most violent partisans of the revolution, and by the most implacable among its enemies. He died on the 2d of April 1791.'

The remainder of this work is occupied by accounts of the king's flight to Varennes, of the measures to which that event gave rise, of the petition of the Jacobins, of what has been called the massacre of the *Champ de Mars*, and of the dissolution of the famous Assembly called the Constituent. When it was discussed, after the king's flight, whether process could be instituted against him, the whole assembly, except eight, voted in the negative. In this minority were *Petion*, *Buzot*, and *Robespierre*, who had violently contended for bringing the king to trial. When the assembly finally broke up, the first and the last of these three were carried on the shoulders of the multitude; the epithet *virtuous* was given to *Petion*, and that of *incorruptible* was bestowed on *Robespierre!* This popularity of his open enemies was a sad presage for the unhappy monarch. —When the constitution was presented to the king for his acceptance, he readily gave it: but when it was notified to him that the assembly was about to dissolve itself, he testified his regret that it did not continue its functions, and see its work put to the trial, in order that it might consider of such amendments as experience should point out to be necessary. The insults, however, which it had experienced from the people, and the disgust which they inspired, prevented this reasonable suggestion from having any effect. Had it been otherwise, perhaps many of the dreadful events which followed would never have disgraced the annals of mankind!

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* That part of the hall in which the anti-revolutionists sat.

† That part which was occupied by the revolutionists.

Jo.

ART.

ART. X. *Memoires de* HENRI LOUIS LEKAIN; *i. e.* Memoirs of H. L. LEKAIN, edited by his eldest Son; to which are added several unpublished Letters to and from *Voltaire*, *Garrick*, *Colardeau*, *Lebrun*, &c. 8vo. pp. 430. Paris. 1801. London, De Boffe.

THE hero of these memoirs was one of the greatest actors of the French stage, and the idol of all the French tragic writers and lovers of the drama. After having exercised his profession with the approbation of the learned, and with the unbounded applause of the public, during 30 years, he formed the design of retiring from the stage, and spending the remainder of his days at *Fontenay*, near *Vincennes*, in a small house which he called his *Chaumière* (thatched cottage); and there, in ease and tranquillity, he proposed to digest his own memoirs, and to commit to paper some reflections on his favourite art: but, says the editor, he died in 1778, at the instant when he had hoped to enjoy the fruits of his labours.

HENRY LOUIS LEKAIN was born at Paris in 1729, the same year in which the French theatre lost the celebrated actor *Baron*. His father was a goldsmith, and destined his son, after great care had been taken of his education, to the same business. At this early period of his life, he excelled in the fabrication of chirurgical instruments, and had made himself known by this species of mechanical ingenuity; when an irresistible passion for the stage instinctively called forth a talent which occasioned the total neglect of his proper trade, for the study and rehearsal of parts in tragedy. He began, as our Garrick did, to repeat favourite speeches in private company; and he had the good fortune to be introduced to *Voltaire*, who had then in *la Rue traversiere* (Cross Street) a little theatre, in which his pieces were tried before he ventured to give them to the public. This celebrated poet, soon discovering in LEKAIN an actor who could feel, and make others feel, the sublime beauties of tragedy, instructed him with the utmost care, finally made him relinquish every employment but that of the stage, and gave him an apartment in his own house.—The editor has inserted, from the *Mercure* of the year 1750, (when the Abbé *Raynal* was its conductor,) a list of the parts in which LEKAIN first appeared during his probation; with the prevailing opinion of his talents at that time. For example: "The public seem to have decided that this performer is intelligent, expressive, and truly pathetic; that his action is noble, and that he treads the stage with great ease. These talents, however, are ballanced by defects; some, indeed, that are very striking, not to say incurable: yet, notwithstanding these, he moves, touches, and attracts;——and he is but 20 years old."

The Chevalier *de Mouhy*, soon afterward giving an account of new actors and actresses at Paris, says; " among the rest, LEKAIN, a goldsmith, has distinguished himself in an extraordinary manner. He performs the principal parts in tragedy with such feeling, intelligence, force, and truth, that he is universally admired." The Chevalier mentions the pains which *Voltaire* had taken with him, and his performances in the poet's own little theatre, before persons who were capabie of appreciating and patronizing talents. He speaks also of LEKAIN's natural defects, and of his endeavours to conquer them; of " the docility with which he listened to advice, and which was such as to silence his greatest rivals and bitterest enemies; till, by incessant study and labour, he had corrected the faults with which he was reproached. At present, he is the delight of the tragic scene; and there is no doubt that he will be received into the royal company of comedians, as a model of declamation and just acting. He has had a number of splendid theatrical dresses sent to him as presents by a great prince, and by three other persons of distinction."

Nature had given to LEKAIN an unfavourable countenance, a melancholy tone of voice, and a thick and inelegant figure. It seemed, therefore, to have thrown in his way unconquerable obstacles to his attaining the distinction of a complete actor: but study and experience developed the sentiments concentered in his heart, animated his whole person, inspired him with the most dignified attitudes, fortified his voice, and impressed in every motion a grand character of passion; till finally, art so much befriended him, that even the greatest beauties were heard to exclaim in the boxes: " how handsome he is!"—His probation, however, continued 17 months; and notwithstanding all the applause which he had received, he seemed likely to be rejected when he went to play the part of *Orosmane*, in *Zaire*, before Louis XVth: but that prince, who had knowlege, good sense, and a natural taste which nothing could bias, was astonished that such false accounts of this actor had been brought to him; declaring that " *he had drawn tears from himself, who scarcely ever wept at tragedy.*" This opinion, so publicly given, was sufficient:——he *must* be received.

The French theatre at this time possessed the actresses *Dumesnil*, *Gaussin*, and *Clairon*, with Messrs. *Sarrasin*, *Lanoue*, &c.; and amid such a constellation of talents, the theatre acquired a perfection and celebrity which it cannot soon be expected again to enjoy. It completely formed LEKAIN; who united all the perfections which he had witnessed, and of which he afterward became the guardian and the model. It is well known that he and Mademoiselle *Clairon* first quitted the ridiculous old stage dresses,

dresses, assumed habits of *costume*, and established this improvement on the theatre.

Thus far we have extracted from our hero's eloge in the *Mercure*, Mar. 1778. The first piece in these memoirs, which is written by LEKAIN himself, is intitled '*Particular Facts* relative to my first connection with M. *de Voltaire*.' Here we have an account of all the little private theatres in Paris, in 1748, at the time of the rejoicings for the peace; of one of which (at the *Hotel de Jabac*) he himself was the founder: but of all these young *spouters*, though some of them entered into provincial companies, he was the only one who established himself at Paris.—He relates that his acquaintance with his patron, *Voltaire*, had its beginning at one of these little theatres, or rather *spouting clubs*, which the poet had honoured with his presence; and who, being somewhat pleased with the manner in which he had performed the part of a *lover* in the comedy of the night, made inquiries respecting him of the author of the piece, and desired to see him and have some conversation with him at his own house. The young Roscius then describes his reception, and the respect and enthusiasm with which he approached this great man;—'whose eyes flashed fire, wit, and imagination.'

'While I was trying to make him a speech, without being able to give it utterance, M. *de V.* put an end to my embarrassment, by throwing his paternal arms round my neck, and *thanking God for having created a being who had moved and affected him, by repeating bad verses*.—He asked me a great number of questions concerning my parents, profession, education, and future prospects. After I had satisfied him in these particulars, and taken part of a dozen cups of chocolate and coffee, (which formed the poet's sole nourishment from five in the morning till three in the afternoon,) I answered him with great firmness and intrepidity, that I knew of no happiness equal to that of acting plays; that a cruel and afflicting calamity had left me master of my actions; and that, being in possession of a small patrimony of 750 livres a year, (about 30 guineas) I had hopes that, if I gave up trade and the business of my father, I should not lose by the exchange, provided that, at some future period, I should be admitted into the King's company of comedians.

"Ah my friend! (cried M. *de V.*) make no such resolution. Take my advice; act for your pleasure, but not as a profession: it is the first, most rare, and most difficult of talents, but it is disgraced by barbarians, and proscribed by hypocrites. France will one day entertain a proper esteem for your art: but then there will be no *Baron*, no *Lecouvreur*, no *Dangeville!* If you will relinquish your project, I will lend you 10,000 francs to set you up; and you shall pay me when you can. Go, my friend, and return at the end of the week; reflect well on my proposal, and give me a positive answer."

'Astonished, confused, and moved even to tears, by the kindness and generous offer of this great man, whom they called a miser, unfeeling and pitiless; my heart overflowed with gratitude. I was beginning to make speeches, without being able to pronounce a word, and was retiring, much dissatisfied with my inability to express my sensations, when he called me back, and desired me to repeat some fragments of speeches in the parts which I had studied. Without reflection, I offered to give a speech in *Gustavus*.—— "No *Piron!* (he cried out in a thundering and terrible voice;) I hate bad verses—repeat to me all that you can remember of *Racine*." —— Luckily, when at school, at the Mazarin college, I had gotten all the tragedy of *Athalia* by heart, after having heard it read many times to the scholars who were to act in it. I therefore began the first scene, repeating, alternately, the parts of *Abner* and *Joab:* but I had not quite performed my task, when M. *de V.* exclaimed, in a fit of enthusiasm, "*Good God! what admirable verses!* And what is very astonishing, the whole drama is written with the same fire, the same purity, from the first line to the last; the whole tragedy is admirable! —— Adieu, my child, (added he, embracing me,) I will venture to predict that you will have a voice which will penetrate the soul, and that you will be the chief delight of Paris: but, for heaven's sake, do not mount any public stage."

'Such was our first interview; the second was still more to my satisfaction, because, at my earnest intreaties, he consented that I should pursue my dramatic studies, took me into his house, gave me my board and a good apartment, and built a small theatre at the top of his mansion, in which he allowed me to act with his nieces, and my spouting friends.'

The rest of these Particulars consist of anecdotes full of the highest praises of *Voltaire*'s generosity and disinterestedness. These encomiums, whether deserved or exaggerated, at least manifest the goodness of LEKAIN's heart, and are honourable to his memory: but the pleasure of the Poet and that of the Actor was reciprocal. The former found in the latter a young man whose talents fulfilled his ideas of dramatic perfection; and who realized so successfully his own conception in writing, that he probably foresaw that, in future, LEKAIN would become the chief support of his tragedies. Indeed, both these celebrated men seem to have had such exalted ideas of theatrical importance, as to think that not only the honour and welfare of France, but of the whole universe, depended on its cultivation and prosperity.

Many of the papers in this volume contain narrations of theatrical squabbles and controversies long since forgotten in France, and which must be totally uninteresting in England. Instigated, doubtless, by *Voltaire*, at one time LEKAIN drew up an address to the Lords of the King's bed-chamber, who had the

the direction of the theatres, intreating them to establish a Royal Academy for the education of young dramatic performers; as Louis XIV. had done for music, painting, and sculpture. In this memorial, great jealousy and indignation are expressed on account of the increasing favour of the Comic-Opera at this time, (1756.) We find also another memoir for the removal of the Benches which were allowed for select parties on the stage, to the utter destruction of all illusion by scenes, machinery, and stage effect. This point was carried.—Perhaps the best letter in the volume is the answer written by LEKAIN, in the name of the whole company, on the occasion of a great nephew of *le grand Corneille*, in indigent circumstances, having solicited a benefit at the French theatre. The request is here granted in the most polite and benevolent manner.

Critiques on plays, or casting of parts, and on the manner of acting them, next occur: but, at this distance of time, these observations can very little interest the admirers of the drama in France, and still less those of other countries.

The *Deliberation* in 1773 on a plan for establishing a secular *Commemoration* of *Moliere*, and for erecting a statue to his honour, is the most and nearly sole generally interesting scheme which we find among the detached pieces of this work. The rest may be termed local as well as temporary. The plan, however, was not supported like our Commemoration of Handel, in 1784; and the benefit play in France produced only 3600 livres, little more than 150*l.* sterling.

Voltaire's partiality to LEKAIN, and the actor's reverence for the poet, continued to the end of their lives. M. *de V.* commences a letter to him in 1762, thus: "*Monsieur le Garrick de France*—but you are Garrick only in merit, not in purse"—&c. In 1763, he begins, in the same manner, an answer to a request from the whole troop at the French theatre, to supply them with a new tragedy. After having expressed his sense of their regard, and how much he is obliged by their attention, he says: "but you must not imagine that, in writing tragedies of five acts in Alexandrine verse, the ice of mount Jura communicates much inspiration. An old man may write tales about *Mother Goose:* but tragedies demand the fire of youth; and, unluckily, I have none but what is in my chimney."—The next letter begins—"My great actor," &c. Here he complains of an erroneous passage in a new edition of *Adelaide*, which is neither French in the construction, nor intelligible in the sense. "I have written (he says) many bad verses in my time, but, thank God! I have not to reproach myself with these."

In 1770, he thus commences a letter:—"My very great and very dear support of expiring tragedy, it was said in the

King's apartments that you were dead: but, thank God, I find that you are still living.——Truth is seldom heard in a royal residence."—A subsequent letter gives a character of Madame *du Deffant*, the great friend of the late Lord Orford.—In 1776, he speaks of a *petite apoplexie*, which had deranged him, body and soul: but, afterward, he says; "I have worked night and day at a new tragedy, notwithstanding my bad health."

Most of the poet's letters turn wholly on the subject of corrections and changes in his latter plays, which, as their success was not brilliant, have been little read; and therefore this correspondence will not be very amusing. Now and then, however, a happy expression escapes from the old bard, who could not suppress his propensity to wit, even were he so inclined.——This literary intercourse between *Voltaire* and LEKAIN continued till the year of both their deaths, 1778.

Prince Henry of Prussia began a correspondence with the Tragedian in 1769. One of the Prince's letters, dated Berlin 1771, was sent by *Salomon*, for whom it bespeaks a regard which is very honourable to the talents of that excellent performer:

"Sir,

The bearer of this note, Mr. *Salomon*, my first Violin, intending to pass some time in Paris, I am very glad to procure for him the acquaintance of a man of such distinguished talents as you possess. He will tell you how much I constantly interest myself in your prosperity, and in all that can contribute to it; being, with the most perfect esteem,

Your very affectionate

HENRY."

By another epistle from this Prince, dated in 1775, it appears that LEKAIN had formed the design of going to Berlin; and the Prince names the plays in which it was wished that he would appear at Potzdam and Rheinsberg: but in the next we find that this tour was frustrated by various adverse circumstances, in that year. From another, however, in 1777, we learn that it had been accomplished, from the Prince's encomiums on, and admiration of, his talents; and from his expressions of the pleasure which, he says, he had received from them at Rheinsberg.

The letters of our admirable countryman Garrick, to his brother Roscius, are only friendly and civil; indeed, there was neither opportunity nor occasion for him to manifest that wit, humour, and ingenuity of thought, in a foreign language, which he could not restrain in his own. In 1765, it appears that LEKAIN came to England, in hopes of seeing Garrick on the stage in some of his capital parts: but unluckily he was

gone to Bath for his health, and we believe that they did not meet.

Several letters from M. *la Harpe*, written while he was on a visit at Ferney, exhibit his usual spirit. One from Mademoiselle *Clairon*, on theatrical cabals, also occurs; and another from Ferney in 1765, where she acted, on *Voltaire*'s stage, the principal female parts in all his best plays.

LEKAIN himself (p. 326.) gives a very modest and interesting account of his own reception at Ferney in 1756; and of the poet's rage on his mistaking the part of *Gengiskin* in the Orphan of China. We should have inserted this narrative, if our pages would have admitted it at present.

The *Remonstrances* from LEKAIN to Monsieur *de Sartine*, to the Duke *de Richelieu*, and to the Duke *de Duras*, on the subject of his imprisonment, and that of the whole company of the King's comedians, in *Fort l'Evèque*, are expressed with firmness, and are curious as coming from an actor during the old monarchy. This tragic hero, indeed, was by nature an intrepid and steady character, free from frivolity and caprice; by art and study he had acquired dignity; and he had, perhaps, imbibed also some ideas of self-importance, from the characters which he had so often represented. He never totally quitted the truncheon or the diadem, any more than his tragic partner, Mademoiselle *Clairon*, laid aside her regal state. Neither of them had that flexibility of character which was possessed by Mr. Garrick; who could set the Green-room in a roar of laughter, between the acts of his deepest tragic parts. Neither does LEKAIN seem to have been gifted with any original ideas in drawing up his addresses delivered to the audience, at the opening and close of the theatre; which are so extremely humble, and so full of compliment and adulation, that they would have been deemed fulsome by an English audience. "The *Théatre Françoise* (he says) constitutes their chief national glory in the eyes of other people, as it is become the theatre of Europe, and of the universe."—

Various other letters addressed by several personages to the hero of these memoirs, and his answers, are inserted: but we have not room to particularize them; nor do they call for especial notice.

On the whole, we have been somewhat disappointed in perusing the present volume. We found materials *towards* a life of this celebrated actor, but no regular series of incidents, nor even of professional transactions. It includes original discourses, and occasional writings, by LEKAIN and by others: but they are detached, and unconnected either by notes or by remarks on their failure or success. The pieces written by himself

himself discover the man of sound understanding and probity of heart, but they display no genius beyond that of being the skilful interpreter of the beautiful thoughts of others. They manifest good sense, but it is unadorned with wit, humour, or eloquence. Many of his pieces, indeed, might have been omitted without any great loss to the reader. We expected, also, some anecdotes concerning Garrick during his residence at Paris, of which many were in circulation long after that period: but M. LEKAIN gives us no information beyond the concerns of the *French theatre, and its cabals.*

Dr B...y.

ART. XI. *Du Calcul des Dérivations*, &c.; *i. e.* The Calculus of Derivations. By L. F. A. ARBOGAST, of the National Institute of France; Professor of Mathematics at Strasburgh. 4to. pp. 420. Strasburgh. 1800. Imported by De Boffe, London. Price 1l. 1s. Boards.

IN matters of taste, one excellent performance does not cause its predecessors to be less read: but in abstract science and natural philosophy, it is a great merit in a treatise to supersede those which were prior to it; and the history of mathematics records in terms of praise the names of many, whose works now repose quietly in libraries, or are disturbed only for the gratification of curiosity; to mark the progress of the human mind, or to view in their infancy the germs of theories now matured. When treating on pure science, compendium and conciseness are principally to be attempted: but some, even among those whom the world reputes learned and ingenious, exclaim against these qualities; because certain authors have arrogated to themselves the merit of conciseness, for having cut away necessary steps of demonstrations, rather than removed what was redundant and obstructive. For the purpose of investigation, the shortest road is the best; and it is a puerile perversion of terms to call that a bye path which is the most direct road, and on which men may travel, securely and expeditiously, to the object of research. In our opinion, also, it cannot be truly said that the habitude of just reasoning, and of intellectual strength and activity, are the necessary results of extensive inquiry; for, in the excessive toil of the head, confused notions readily find reception, and we suffer mere words to pass current, when we are too much fatigued to examine their real weight and worth.

Among other qualities, the present work of M. ARBOGAST possesses those of conciseness and compendium: it teaches to derive by natural, direct, and easy methods, many formulæ and theorems heretofore obtained by artifice, circuitously and intricately; and it merits in some degree the commendation bestowed

bestowed by Lord Bacon on a good book, since it is like the serpent of Moses, which devoured the serpents of the enchanters. We shall endeavour to do justice to the author by giving the plan and a brief analysis of his treatise.

The method of calculation here employed depends on a general manner of considering quantities deriving themselves one from the other: hence the title, *Calculus of Derivations.*

'To form an idea (says the author) of these derivations, it is to be observed that quantities or functions, which are deduced the one from the other, by an uniform process of operations, are derived quantities; such are the successive differentials. This idea may be extended, by considering quantities that are derived one from another, not in themselves, but solely in the operations which collect and bind them together; the quantities themselves being any whatsoever, arbitrary and independant. Thus, on the supposition that, out of many different letters, the first enters solely into a function, while the two next enter into the derivative of that function; that the first three, by the same law, enter into the derivative of the derivative, and so on; we shall have the derivatives in the extended sense which I have given to them. In my theory, the quantities designated by different letters are not derived one from another; and the derivatives which I consider are less the derivatives of quantities than of operations; as algebra is less a calculus of quantities than of operations, arithmetical or geometrical, to be performed on quantities. Derivation is the operation by which a derivative is deduced from that which precedes it, or from the function. The method of derivations, in general, consists in seizing the law that connects together the parcels of any quantities whatever; and in making use of this law as a method of calculation for passing from derivative to derivative.'——

'In order to form the algorithm of derivations, it has been necessary to introduce new signs I have given particular attention to this object, persuaded that the secret of the power of algebra consists in the choice and happy use of signs, that are at once simple and characteristic of the theory which they are intended to signify; and on this account I have prescribed to myself the following rules: 1st, To render the notations as much as possible analogous to the notations in use. 2dly, Not to introduce unnecessary notations, which, without confusion, might be replaced by the ordinary notations. 3dly, To choose those which are most simple, at the same time introducing into them all the varieties which the different operations require.'

The symbol d is consecrated by *Leibnitz* to denote the operation for obtaining the differential of a quantity; thus, $d(x^m) = m\,x^{m-1}\,dx$ $d(a^x) = a^x\,dx$.
To denote the operation for obtaining the derivative of a quantity, M. ARBOGAST employs the symbol D; thus, $D(x^m) = mx^{m-1}$, $D(a^x) = a^x$; and the developement of a function, $F(a+x)$, is therefore thus expressed;

Fa

$$F\alpha + \frac{DF\alpha}{1}x + \frac{D^2F\alpha}{1.2}x^2 +, \text{ \&c.}$$

which, according to the notation in the differential calculus, is

$$F\alpha + \frac{dF\alpha}{d\alpha}x + \frac{d^2F\alpha}{1.2.d\alpha^2}x^2 +, \text{ \&c.}$$

To avoid writing the factors, 1. 2. 3, &c. in the denominators, let D_c^n generally represent $\frac{D^n}{1.2.3.\text{---}n}$; then,

$F(\alpha+x) = F\alpha + DF\alpha.x + D_c^2F\alpha.x^2 + D_c^3F\alpha.x^3 +$, &c.

This is the known form for the developement of the function of a binomial; and the object of the primary articles of the present treatise is to find a form for the developement of the function of a polynomial; viz. $\alpha+\beta x+\gamma x^2+\delta x^3+$, &c. The method of obtaining it may be thus briefly explained:— When α is variable, and $D\alpha=\beta$, write $D.\varphi\alpha$ for the derivative: when α is variable, and $D\alpha=1$, write $D\varphi\alpha$ for the derivative: therefore,

$\varphi F(\alpha+\beta x) = \varphi(F\alpha + D.F\alpha.x + D_c^2.F\alpha.x^2 +$, &c.):

but $\underset{F}{\varphi}F(\alpha+\beta x) = \varphi F\alpha + D.\varphi F\alpha.x + D_c^2.\varphi F\alpha.x^2 +$, &c.

put $F\alpha=a$, $DF\alpha = D.a$, &c. and $\varphi(a + D.a.x + D_c^2.a.x^2 +$, &c.$) = \varphi a + D.\varphi a.x + D_c^2.\varphi a.x^2$, &c.

Now, to determine $D.\varphi a$, $D^2.\varphi a$. &c. we have

$D.\varphi a = D\varphi a.D.a$

$D^2.\varphi a. = D.(D.\varphi a) = D(D\varphi a.D.a) = D\varphi a.D^2.a + D^2\varphi a.(D.a)^2$, and so on.

To find $\varphi(\alpha+\beta x+\gamma x^2+$, &c.), put it $= \varphi\alpha + D.\varphi\alpha.x + D_c^2.\varphi\alpha.x^2 +$, &c.; develope $D.\varphi\alpha$, $D^2.\varphi\alpha$, &c.; and after developement put $D_c.\alpha=\beta$, $D_c^2.\alpha=\gamma$, $D_c^3.\alpha=\delta$, &c. Hence it appears that $\varphi(\alpha+\beta x+\gamma x^2+$, &c.) may be converted into a series of the form $A+Bx+Cx^2+Dx^3+$ &c.; and the first term A will $=\varphi\alpha$.

The coefficient of the second term will $= D.\varphi\alpha$, or $D.A$.

The coefficient of the third term will $= D^2.\varphi\alpha$, or $D^2.A$.

The coefficient of the $\overline{n+1}$ will $= D^n.\varphi\alpha$, or $D^n.A$.

provided that, after the derivations have been made, we put in the results β for $D.\alpha$, γ for $D_c^2.\alpha$, &c. B for $D.A$. C for $D_c^2.A$, &c.

The coefficient of x^n or A_n in the series $A+Bx+$, &c. equals $D_c^n.\varphi\alpha$, which is$=D\varphi\alpha.D_c^{n-1}.\beta + D_c^2\varphi\alpha.D_c^{n-2}.\beta^2$ + &c. ——$D_c^n\varphi\alpha.\beta^n$.

The method of proof is this:—

put $\pi = \beta + \gamma x + \delta x^2 +$, &c.

then $\varphi(\alpha+\beta x+\gamma x^2+$ &c.$) = \varphi(\alpha+\pi x)$

$= \varphi\alpha + D\varphi\alpha.\pi x + D_c^2\varphi\alpha.\pi^2x^2 +$, &c. (1)

but

but π, π^2, π^3 —— πn are functions of the polynomial, $\alpha + \beta x + \gamma x^2$, &c.

$\therefore$ generally $\pi^n = \beta^n + D.\beta^n.x + D.^2.\beta^n.x^2 +$, &c. (2)

Write, therefore, in series (1), for π, π^2, π^3—π^n, the values resulting from (2); collect the terms affected with the same power of x; and it will easily appear that the coefficient of x_n, or A_n, is such as we have stated it to be.

In this method is comprehended, as is evident, the form for the developement of a polynomial raised to any power; which was first given, but without satisfactory demonstration, by *De Moivre*, in the Transactions of the Royal Society, and in his *Miscellanea Analytica*, p. 87. The above form of M. ARBOGAST has many advantages; it exhibits compendiously the law of the coefficients by means of the symbol D; and, when the operations indicated are to be actually performed, the coefficients easily result in terms of the polynomial quantities.

The formula for the function, being general, manifestly serves for the developement of expressions, such as

$$\varepsilon^{\alpha + \beta x + \gamma x^2 +, \&c.}, \quad \sin.(\alpha + \beta^n + \gamma x^2 +, \&c.) \quad \&c.$$

After having exhibited the general form for $\varphi(\alpha + \beta x + \gamma x^2 +$, &c.) M. ARBOGAST shews how from one term to deduce the next succeeding, and likewise how to calculate any term whatever of the developement, independently of all the others. The length and intricacy of the calculations render it impossible for us to give details of these methods.

In the latter part of the first article, the author applies his method of derivation to assign the sum of the powers of the roots of an equation, in terms of the coefficients of the equation; and the formula which he deduces is remarkable for the simplicity of the law by which the coefficients are expressed. *Vandermonde*, (Memoirs of the Academy; 1771, p. 373), *Euler*, (Comms. Pat. 15 vol.), *La Grange*, (Memoirs of Berlin, 1768), and *Waring*, (*Meditationes Algebraicæ*, p. 1.), having given general formulæ for the sum of the powers of the roots of an equation, M. ARBOGAST compares his own with the demonstration of those, and shews how they follow from it. Whoever will take the trouble of examining those several formulæ will find them not only less simply expressed than that of the present author, but less evidently and less rigorously demonstrated.

Article II. relates to the developement of functions of two or more polynomials, arranged according to the powers of the same letter.

Suppose the series $a + bx + cx^2 +$, &c. and $\alpha + \beta x + \gamma x^2 +$, &c. &c. are to be multiplied together; then the product is

$a\alpha +$

$\left.\begin{matrix} a\alpha + a\beta \\ + b\alpha \end{matrix}\right\} x +$, &c. or, making $b = D.\ a$, $c = D^2.\ a$, &c. $\beta = D.\ \alpha$, $\gamma = D_c^2.\ \alpha$, &c.; the coefficients of the terms affected with x, x^2, x^3, &c. will be $(a.\ D.\ \alpha + D.\ a.\ \alpha)$, $(a.\ D_c^2\ \alpha + D.\ a.\ D.\alpha + D_c^2.\ a.\ \alpha)$, or $D\,(a.\ \alpha)$, $D_c^2\,(a\alpha)$, and the coefficient of the term affected with x^n will be $D_c^n\,(a\,\alpha)$, which may easily be developed.

Hence the form for the product of any number of series, arranged according to the powers of x, may be determined. In four series, for instance, of which the first terms are a, a', a'', a''', the origin of the derivations will be $aa'\,a''\,a'''$; and the coefficient of the term affected with x^n, will be $D_c^n\,(aa'a''a''')$.

In the developement of the product of any two functions whatever of polynomials, (for instance, of $\varphi\,(a + bx +$, &c.) and $\varphi\,(\alpha + \beta x +$ &c.), the coefficient of the term affected with x^n will be $D_c^n.\ (\varphi\alpha.\ \varphi a)$; which, by foregoing methods, may be easily developed.—Since $\frac{1}{A}$ and A^{-1} are equivalent expressions, by the foregoing methods, fractions such as $\frac{a + bx +}{\alpha + \beta x + cx^2 +,\ \text{&c.}}{\gamma x^2 +,\ \text{&c.}}$, $\frac{1}{(\alpha - x)^r\,(a-x)^s.\,(A-x)^t,\ \text{&c.}}$ may be converted into series of the form $A + Bx + Cx^2 + Dx^3 +$, &c.

After M. Arbogast has applied his method to such fractions, &c. as we have mentioned, he shews how to deduce the form for the developement of $\varphi\,(a + bx + cx^2 +$, &c., $\alpha + \beta x + \gamma x^2 +$, &c.) and assigns the form for the coefficient of the term affected with x_n. The law by which these forms are regulated is simple, and easily comprehended.

The IIId article contains the developements of functions of one or more polynomials, arranged relatively to the powers and to the products of two or more different letters, into series arranged in the same manner. With this section, the first part terminates, and its principal object reduces itself to the following general problem:

Any function whatever of one or more simple, double, or triple polynomials being given; to write immediately the series of the developement of this function; and, moreover, to write immediately the developement of any term whatever of this series, independently of the other terms.

'When we use the expression "to write immediately" (says M. Arbogast,) it is to be understood that we already know the successive derivatives $D\varphi a$, $D_c^2\varphi a$, &c. where a varies from 1: otherwise, it will be necessary to begin by calculating them.

'We presume to think that geometricians will find our methods new, easy, and analytical; and I am of opinion that the solution of the

the complicated cases concerning any functions whatever, of several simple polynomials, and the functions of double, triple polynomials, &c. has not before been attempted.

'A crowd of applications present themselves, which embrace the principal branches of the theory of series, and simplify many researches: the practical part of the differential calculus, for instance.'

Next in order is article III. containing applications of derivations to recurring series, as well simple as double, or triple, &c. of any order whatever.

The authors who have treated of recurring series are *De Moivre*, in his *Miscellanea Analytica*, and Doctrine of Chances; *Euler*, in his *Introductio in Analysin Infinitorum*; *La Grange*, in *Mélanges de Turin*, in Memoirs presented to the Academy of Paris, and in the Berlin Memoirs; and *La Place*, in Memoirs presented to the Academy of Paris, and in the Memoirs of the Academy. To the subject of the researches of these great mathematicians, M. ARBOGAST applies his method of derivations; and he certainly obtains by it, in our opinion, expressions very admirable for their simplicity, and for the facility with which they can be expanded. In the methods of the authors above mentioned, in order to find the general term, the denominator of the generating fraction is resolved into its factors; which is done by finding the roots of the denominator put $= o$; consequently, if the denominator exceeds an equation of the fourth degree, the general term cannot be found:—but, by the method of derivations, the general term is assigned in terms of the coefficients of the denominator of the generating fraction and other quantities; thus, if the generating fraction be $\frac{\alpha+\beta x+\gamma x^2}{a+bx+cx^2+dx^3}$, the expression for the general term of the resulting recurring series is $D_c{}^m\,(\alpha a^{-1})$, or $\alpha\, D_c{}^m.\, a^{-1}+\beta.\, D_c{}^{m-1}\, a^{-1}+\gamma.\, D_c{}^{m-2}.\, a^{-1}$, ($D_c{}^3.\,\alpha$, $D_c{}^4.\,\alpha$, &c. being $= o$)

In the course of this article, M. ARBOGAST shews how to find at once a part of the general term of a recurring series, proceeding from several equal factors in the denominator of the generating fraction: thus, let $\frac{P}{Q}$ be the generating fraction, and $N\times(\alpha-x)^m=Q$; in $\frac{P}{N}$, put α for x, and suppose $\frac{P'}{N'}$ to be what this fraction becomes; then the required part of the general term will be $D^{cm-1}\left[\frac{P'^{-n-1}}{N'^{a}}\right]$, and $Da=-1$ and $n+1$ the index of the term.

As a last example in simple recurring series, M. ARBOGAST determines the sine and cosine of any multiple angle in cosines of the simple angle E. We cannot enter into an examination of this method, but must content ourselves with merely stating that the demonstrations for the forms expressing the sines, cosines, &c. are much more clear and rigorous than any that we have hitherto seen.

In the last part of the fourth article, the author treats of double and triple recurring series: a subject difficult and complicated, but here discussed with much ability.

Art. V. contains applications of the calculus of derivations to the general reversion of series. No part of the present treatise is more ably executed than this; and here the author chiefly insists on the advantages which, in point of simplicity and generality, his notation and methods afford him:

'The general reversion of series, (he says,) treated by derivations, is one of the subjects on which I have been employed, with the greatest pleasure, and perhaps with the greatest success. I presume to hope that it will be found to be presented with greater generality and facility than it has hitherto been; that the very extensive theorem placed at the beginning of the article will be judged worthy of attention, together with its demonstration; and above all the method by which I have derived from it the different propositions concerning the reversion of functions and of simple series; propositions which include the most valuable theorems known on the subject. The facility with which the developements are effected by the rules of derivation is, moreover, worthy of notice.'

Art. VI. On the use of derivations in the differential calculus. In the method of derivations, the quantities α, β, γ, &c. are not necessarily dependent on each other; and hence the case, in which these quantities *are* dependent on each other, must be comprehended in the general case of derivations. In the differential calculus, the quantities dx, $\frac{d^2x}{1.2}$, &c. depend on each other; and for this reason it may be considered as a particular case of the calculus of derivations. This is briefly the reasoning of M. ARBOGAST, and it is just, under certain considerations: but, nevertheless, the principal theorem in the differential calculus is necessarily antecedent to the principal theorem in the derivative calculus; and the author, in fact, uses the former to establish the latter.

In this part, the invention most worthy of notice is the method of separating the scale of operations (*méthode de séparation des échelles d'operations*); which affords us, says the author, the means of presenting complex formulæ under a very simple form, and of arriving with extreme facility at important results.

sults. 'Generally considered, this method consists in detaching, (when it is possible,) from the function of the variable quantities, the signs of operation affecting that function; and in treating the expression compounded of these signs and other quantities, (which expression I have called the scale of operations,) in the same manner as if the signs of operations which there enter were quantities: then, to multiply the result by the function.' By this method, M. ARBOGAST has been enabled to treat with great simplicity, clearness, and generality, that particular species of calculation, which took its rise in the analogy observed by *Leibnitz* to prevail between the positive powers and the differentials, and between the negative powers and the integrals.

To give an easy instance of the scale of separation, let d be the note of complete differentiation, d'^{1} of differentiation relatively to y only, and $d^{1'}$ to x only; then the scale of differentiation is $d = d'^{1} + d^{1'}$, and $d(xy) = (d'^{1} + d^{1'}).xy = d'^{1}.(xy) + d^{1'}.(xy) = xdy + ydx$. In the second differentiation, the scale is $d^{2} = (d'^{1} + d^{1'})^{2}$; and in the nth differentiation, $d^{n} = (d'^{1} + d^{1'})^{n}$; by which form, the nth differential of any rectangle is easily obtained.

The VIIth article consists of three divisions: the first containing the application of the formulæ of derivation, to the developement of the functions of polynomials containing sines, cosines, &c.: the second gives the application of the derivative calculus, to the product of factors in arithmetical progression; and the third shews the application of the separation of scales to the direct and inverse method of differences.

'Such (says M. ARBOGAST) are the subjects treated in this work: they are connected together by a general and uniform method, which invites to new applications, at the same time that it considerably abridges calculations of which the length, frequently excessive, has formed one of the chief obstacles to the progress of analysis. In causing many important theories and solutions, founded on different principles and methods, to approximate, I have been especially anxious, in order to render manifest the utility of the calculus of derivations, to attach to this calculus several of the most elegant formulæ for which the scientific world is indebted to the sagacity of those great mathematicians, *La Grange* and *La Place*. "These sorts of *rapprochemens* (says *La Grange*) are always instructive, and must conduce to the progress of analysis: it may even be said that they are necessary in its present state; for, in proportion as that science is extended and enriched by new methods, it becomes more complicated; and we can simplify it by merely generalizing and reducing together the methods which are capable of these advantages."

'If any thing inclines me to think that the object of this work is not unworthy of the attention of geometricians, it is the desire ex-

pressed by one of the best English analysists, Professor Waring, for a method of which the object should be similar to that of the method of derivations; and which he designates by the name of the direct and inverse method of reduction (*methodus deductionis et reductionis*): but he merely makes mention of it, and provides no means of attaining it. With this wish he terminates his *Meditationes Analyticæ*; —an important work on series, and the differential and integral calculus.'

The fondness of authors for their own productions is so natural and so usual, that the world hears their claims to distinction with indulgence, and allows a certain scope and privilege to self-elation: yet vanity, though prevalent, is not therefore commendable; and, generally speaking, where there is the most native excellence, there is likewise the least presumption. A wise man, conscious of his powers and performances, asserts his claim, when necessary, with firmness, but without ostentation. Among mathematicians, the ebullitions of conceit are least to be expected, when their discipline, their severe studies, and their consequent mental habits are considered; and such is the fact:—men of research find that, when opinions are disengaged from verbal incumbrances and redundances, the number of certain truths is very small, and those are to be acquired only by long and diligent meditation. Vanity, in the author of the present volume, we could easily have excused, because he has considerable ground for such a feeling: but he speaks of his labours with singular modesty, and the expectation raised by the preface is more than satisfied by the perusal of the work itself. The nature, plan, and conduct of his publication may be in part understood from our brief and imperfect analysis; *imperfect*, we presume, chiefly from the circumstance of the author not having filled his pages with superfluous matter and redundant examples,—his design being executed simply, clearly, and systematically. Indeed, the 'Calculus of Derivations' is an exemplar, a practical proof of what a scientific book ought to be:—it is deep, yet clear; rich without parade; great by little means; and systematic, without the tediousness of formality:—it has overcome difficulties without artifice; it has arrived at high truths by a road at once the most direct and the plainest: it has sounded vast depths, yet has not perturbed the waters; and it guides us through the labyrinths of intricate calculation, ever holding the clue of an enlightened method.

R. Wood.

ART. XII. *Histoire Naturelle de Buffon*, &c. i. e. BUFFON's Natural History, a new Edition. The Birds, Quadrupeds, and Fishes, edited by RENE-RICHARD CASTEL; 36 Vols. The Mineralogy by EUGENE-MELCHIOR-LOUIS PATRIN, in 5 Vols. With Plates. Small 12mo. Paris. 1801. Imported by De Boffe, London.

ALTHOUGH the original work of BUFFON is universally allowed to be amusing, elegant, and instructive, yet its want of order in the arrangement sometimes excites emotions of disgust in the minds of its scientific readers. The editor of the present publication has therefore corrected this defect, by adopting the Linnéan system. He has also much abridged the theories; and he has omitted most of the notes, together with the whole of the former parts relating to anatomy and mineralogy. The first three volumes before us contain the essential parts of the theory of the earth, and of those dissertations which treat of the epochs of nature, and of natural history in general;—the Quadrupeds are described in the seven following volumes;—and the next sixteen are filled with the history of the Birds. The plan of arrangement here adopted is certainly a great improvement; since the whole is thus formed into a regular and connected series. Moreover, as it has evidently been the intent of the editor to make a popular edition of BUFFON, we think that certain parts of the original have very properly been suppressed. We wish, however, that the synonima of the different animals had been retained.—The ten succeeding volumes, containing the natural history of fishes, constitute a neat and cheap impression of the splendid and expensive work in folio, published by *Bloch*; to which the history of the larger marine animals has been added. They form either a continuation of M. CASTEL's edition of BUFFON, or may be considered as a separate production.

The Natural History of Minerals, in 5 vols. by M. PATRIN, is also to be regarded both as a distinct production, and as a part of M. CASTEL's publication; supplying the place of the mineralogical portion of M. BUFFON's work, which has here been very judiciously rejected.—Our notice of the preceding volumes has been concise, because they are merely new editions of former books: but this mineralogical part being new and original, and the performance of a respectable naturalist, it has a claim to more particular attention.

The name of M. PATRIN has been long familiar to us; and we recollect some papers published by him in the *Journal de Physique*. He travelled during eight years in the northern parts of Asia, examined the nature and products of the Siberian

mines, and collected many curious facts, some of which are to be found in the work before us: of which we shall now present to our readers a general sketch, and afterward take notice of a few of the most interesting particulars.

After the introduction, and a concise vocabulary of mineralogy, the author distributes his materials in the following manner: 1. The simple or primitive earths; viz. Silex, Alumine, Lime, Magnesia, Barytes, Strontites, Zircon, and Glucine. 2. The principal ingredients of primitive rocks; namely Quartz, Feldt Spar, Mica, and Schorl. 3. The primitive rocks; comprehending Granite, Gneiss, the lamellated Rocks, Porphyries, Trapp, &c. 4. The crystallized Stones, which are more or less found in the primitive Rocks, especially the precious Stones. 5. The siliceous Substances which are not crystallizable; such as the Flints, Chalcedonies, Agates, Jaspers, &c. 6. Substances which form the secondary Strata, as the common Lime Stones, Marbles, Chalk, Marle, and Clays. 7. Substances which compose the tertiary Strata, as, Pudding-stones, Sands, and Grits formed by the agglutination of particles or fragments. 8. The Metals, amounting to twenty-one in number, and arranged according to the inverse order of their ductility, and their affinity with Oxygen. 9. Volcanoes, with a new theory of their formation and phænomena. 10. Volcanic Substances, such as Lava, Pumice, and (according to M. PATRIN) Basaltes. 11. Pit Coal, Bitumen, and Sulphur. 12. Rock Salt. 13. The extraneous Fossils.

With respect to the last, the author remarks that the primitive strata never contain any vestiges of them; that the more antient secondary calcareous strata contain only a few scattered shells, but that these are found in a much larger quantity with Zoophytes in strata of a later formation; that the most recent of these strata exhibit impressions of fishes, and some remains of oviparous quadrupeds; that the bones of land animals, according to M. *De Luc*, are not found in stony strata, but only in loose beds of earth; that the fossil vegetables, which appear to be most antient, are the ferns and reeds found in the schistus which accompanies coal; and, lastly, that large vegetables, such as trees, are commonly discovered in heaps of sand or gravel, and are then frequently in a siliceous state.

Speaking of Magnesia, (vol. 1. p. 18.) M. PATRIN says,

'Every year, all the deserts of Siberia are covered with an efflorescence of Epsom Salt (Sulphate of Magnesia); and during the short but violent heats which these regions experience, this efflorescence is at times so abundant as to resemble snow. The annual rains and thaws convey this magnesian salt into the brooks and rivers: but still a new efflorescence, equally abundant with the former, appears again

again at the proper season. The soil does not furnish this prodigious quantity of magnesia, for it is argillaceous and quartzose, mixed with a small portion of calcareous earth: but, if even it had contained magnesia, it would certainly have been completely deprived of it, by the repeated lixiviations which its surface has undergone for so many ages.—It seems to me probable that this magnesia is in reality completely formed, in the same manner as the muriate of soda and other saline substances, of which these deserts are an inexhaustible laboratory.'

In vol. 2. p. 24. we have an account of the Siberian Crysolites, Emeralds, and Aqua-Marines, together with a description of the mountain in which they are found. At p. 158. he takes notice of the rare and beautiful Saphirine Chalcedony of Siberia, and makes the following curious remark:

'Those which have this blue tint, to a certain degree of intensity, are extremely rare, and produce a *chatoyant* reflection which renders them precious. This effect, and the blue colour, are owing to a simple modification of the elementary parts of the chalcedony; for it acquires these properties only by long exposure on the surface of the soil. In the great number which I caused to be dug out of the interior of the lava, I never found one which had this blue colour.'—'All the chalcedonies, which I discovered scattered on the surface of the soil, were more or less bluish in the upper part, but were without colour on the side which touched the earth.'

Concerning the Opal found in Hungary, the author says that, 'wherever they dig, the matrix of the Opal is so penetrated with moisture, that the stones themselves are almost without consistency, and break between the fingers. It is only after several days, and after having been exposed to the sun, that they acquire all the hardness of which they are susceptible, and exhibit completely the brilliancy of their colours.'

M. Patrin also observes that the most beautiful Jaspers, found in Siberia, are on the surface of the mountains; and he is of opinion that they have been formed from petro-silex by long exposure to air, light, and weather.

In his account of the mercurial Ores, (vol. 4. p. 321.) the author mentions the following singular fact: 'The mines of Mærschfeld, near Creutznach, afford a remarkable phænomenon: *Collini* says that petrified mercurial fish are there found; they are entirely covered with spots of cinnabar; and the stone which encloses them is a black slate, from which they may be easily separated: but they are very brittle, and not thicker than paper.'

In the above volume, as well as in vol. 5, we find some very peculiar ideas concerning the formation of metals; several of which savour strongly of alchemy.—Our readers may see some

examples in pp. 24. 161. and 342. of vol. 4. and pp. 26. 55. and 186. of vol. 5.—We must also refer to this last volume for the author's theory of volcanoes.

M. PATRIN considers the English Fuller's earth as a marle (vol. 1. p. 8. and vol. 3. p. 277.): but in this opinion he has certainly fallen into a great error; and we are surprized to see the Titanite (vol. 2. p. 84.) arranged with the earthy and stony substances.

The accounts of the various mines in different parts of the world (vol. 4. pp. 233. and 271, &c. &c.) appear to contain much useful information; and although, in several parts, the author soars rather too high on the pinions of fancy, and has been hurried away by the warmth of his imagination, yet every judicious and candid reader must allow that this is not the production of a common compiler;—nor even of a chamber mineralogist, since it evidently bears the stamp of originality, and of being the work of a man who has studied this branch of natural history on a grand scale.

Hatch.

ART. XIII. M. MEUSEL's *Guide to the History of Literature.*

[*Article continued from Appendix to M. R. Vol.* 34.]

THE FIFTH SECTION, or PERIOD, of this History commences with *the Crusades*, and ends with *the Reformation; comprehending about* 400 *years.*

General State of Letters.—Many circumstances concurred, during this period, to repel barbarism, and to recall a better taste. The Crusades, with Asiatic luxury, had also brought into Europe many useful arts and sciences; with a general taste for chivalry, which polished down the rough warrior, and made him the friend and protector of learning as well as of beauty. The institution of universities, in the 12th century, contributed not a little to the advancement of knowlege; and after the conquest of Constantinople by the Turks in 1453, a number of learned Greeks came into the west, who disseminated taste and classic lore over all Europe. The invention of cotton and linen paper, and that of the more glorious art of printing, the rapid progress of free-thinking and free-writing which hence resulted, the discovery of America, and the institution of posts for carrying letters, &c. all contributed to the diffusion of learning, and prepared the way for that sunshine of science which succeeded this period.

The principal Promoters of Learning were, in Italy, the Viscontis of Milan, the Carraras in Padua, but chiefly the Medici of Florence, and the Popes Gregories IX. and X. Nicholas V. and

Pius

Pius II:—in Spain, Alphonsus of Castile and Alphonsus of Arragon:—in Portugal, Dionysius:—in France, Lewis VII. Philip II. and Charles V. and VII.—in Germany, the Emperors of the House of Swabia, particularly Frederic II:—in England, Edward III. and Henry VII:—in Denmark, Christian I:—in Poland, Casimir III:—in Hungary, Matthias Corvinus.

Persons by whose influence Learning was chiefly benefited.—According to M. MEUSEL, these were Peter Abelard, Robert Grossetête, Albert the Great, Matthew Paris, Roger Bacon, Petrarch, Raymund Lully, Æneas Sylvius, or Pius 2d, and the Abbot Tritenheim, commonly called Trithemius.

Schools and seminaries of Learning.—The schools of this period were of two sorts; particular, called *studia;* and general, called *studia generalia*, or *universities*. Both differed from those of former times. They were endowed with privileges by popes, and by secular princes. The first great privileged schools, in Italy, were those of Salerno and Bologna, the Archigymnasium of Rome, and the universities of Padua, Perugia, Sienna, Ferrara, Cremona, and Florence;—in Sicily, Catania;—in Spain and Portugal, Salamanca, Valentia, Siguenza, Toledo, Coimbra, Ferreira, and Lisbon;—in France, Paris, Toulouse, Montpellier, Avignon, Orleans, Grenoble, Perpignan, Angers, Caen, Poitiers, Bourdeaux, and Bourges;—in Germany, Heidelberg, Prague, Vienna, Erfurt, Wirtzburg, Leipsig, Ingolstadt, Rostock, Triers, Freyburg, Tubingen, Mentz;—in Swisserland, Basil;—in the Netherlands, Louvain;—in Great Britain, Oxford, Cambridge, St. Andrew's, Glasgow, and Old Aberdeen;—in Denmark, Copenhagen;—in Sweden, Upsal;—in Poland, Cracow.—The dates of the erection of these universities are given by the author, but some of them are uncertain.——The principal schools of the Jews during this period were, in Spain, at Seville, Granada, Cordua, and Toledo.—The Orientalists had colleges at Bagdad, Damascus, Kupha, Bassora, and Boghara. In Africa, were schools at Morocco, Fez, and Tunis.

Libraries.—Before the invention of printing, great collections of books were rare. The libraries of the Arabian nations consisted chiefly of translations from Greek authors. That of Abumanzar Baharam at Firuzabad contained 7000 volumes.—In the 12th century, Spain possessed not fewer than 70 open libraries belonging to the Moors; the principal of which, at Cordua, is said to have contained 250,000 volumes. The libraries of Constantinople were almost annihilated by the ravages of the Crusaders, and the devastations of the Turks: but many of the books, which escaped, enriched the collections of Italy; where Bologna was the great book-market. In general, the

cloisters

cloisters were the chief repositories of writings, because the monks had more inclination and leisure for copying than any other class of mankind. It does not appear that, early in this period, there were any open public libraries, even in Italy. In 1450, the foundation of that of the Vatican at Rome was laid; and about the same period of time the Ducal library at Florence, St. Mark's at Venice, St. Paul's in the cathedral at London, and that of Trinity College, Cambridge.

State of Philology.—The Jewish philologists of this period were Aben-Ezra, Salomon Ben-Isaac Rashi, Moses Maimonides, and the three Kimchis. The first edition of the Hebrew scriptures was printed at Ferrara in 1476. The author here remarks that Pope Clement v. in the council of Vienna 1311, decreed that the Hebrew, Arabic, and Chaldee, should be taught in all the higher schools: but this decree was little observed.

Among the Greeks, philology flourished principally in the 12th century, under the auspices of the Comnenas. The most remarkable learned men among them were Tzetzes, Eustathius, Emmanuel Chrysoloras, Moschopulus, Bessarion, Theodore Gaza, and Lascaris; whose Greek Grammar, first printed at Milan in 1476, has been the foundation of all others since published. By him and other Greeks from Constantinople, a classical taste was gradually diffused from Italy over the rest of Europe. The fourteenth and fifteenth centuries produced a Petrarch, a Papias, a De Janua, a Malpaghino, an Angeli, a Barzizius, a Guarinus, a Manetti, a Valla, a Bracciolini, commonly called Poggius, a Perottus, a Philelphus, an Hermolus Barbaras, a Politian, a Marcilius Ficinus, and some others of less celebrity. During this time, the Italian language was highly cultivated and embellished; and many of the Greek and Latin classics were translated into it. The Provençal, or Romonza, was cultivated chiefly in the southern provinces of France; whence it soon spred into the other provinces, and into the neighbouring regions of Catalonia, Valentia, Murcia, Majorca, Minorca, and Sardinia.

France produced not many eminent philologists during this period. M. Meusel mentions only Abelard, Alexander de Ville Dieu, and De Lyra.—A similar deficiency prevailed in Germany. Rolef Hausmann, or Agricola, was the first, according to Melancthon, *qui in Germania emendavit genus sermonis et dialecticam.* Three others are mentioned by the present author; viz. Heggius, Liber, and Dringenberg.—In England we find Roger Bacon, Richard Aungervyle, and Michael Scot.

State of Historical Knowlege.—In this walk, the Arabs (according to M. Meusel) were the foremost. Bohaddin Ibn-Scheddad, Abulfeda, Bar-Hebræus, Ibn-Alamid or Elmakin,

and

and two or three others, are here particularly noticed.—The following were Persian historians: Abu-Said, Turan Schah, Sheriffeddin, and Mirkhond.—In Greece, we have the authors in the Byzantine collection, Anna Comnena, William of Tyre, (although he wrote in Latin,) and Gemistius.—The historians of Italy were Gottfredo di Viterbo, Petro de Vincis, Albertino Mussaco, Ludovico Bavarico, Petrarch, Leonardo Bruni, Flavio Biondo, Æneas Sylvius, Benedict Acolti, Antonio Beccatelli, Bartoli Sacchi, commonly called Platina, Bernardi Justiniani, and Julius Pomponius Lætus.—The Spanish historians were Roderigo Ximenes, Juan Nunoz de Villasan, Roderigo de Zamora, and Ferdinando de Pulgar.—In France, we find the names only of Joinville and Froissard.—German historians were, Cosmos of Prague, Otto, Helmold, Arnold von Lübeck, Conrad von Lichtenau, Albrecht, Martinus Polonus, Jakob von Königshosen, and Gobelinus Persona.—Of the many English historians, M. Meusel mentions as the most renowned, William of Malmsbury, Matthew Paris, and Nicholas Trivet.—The father of Russian history was Nestor, a monk who lived in the beginning of the 12th century. His annals, written in Russian, were continued by Abbot Sylvester and Simeon bishop of Susdal. They were printed at Petersburg in 1767.—Aras, or Aré Frodi, wrote, about the year 1148, annals in Islandic, published by Bussæus in 1733. Snorro Sturläson, who died in 1241, was a celebrated historian, statesman, and warrior; he wrote, in Islandic, a history of the Northern Kings, which was published in 2 vols. folio by Peringskiöld in 1697, and by Thorlac and Thorkelin in 1782.—The first good historians of Denmark were Sweno Aageson and Saxo Grammaticus.—The first history of Poland was written by Vincent Kadlubek bishop of Cracow in 1226. It was published by Martino Gallo, in folio, 1749.—A priest named Henry of Lettland wrote a good history of Livonia, from the year 1184 to 1216, called *Origines Livoniæ sacræ et civilis;* published by J. D. Gruber, at Leipzig in 1740.

The principal geographers of this period were Edresi, a learned Mohammedan of Cordua; the best edition of whose work was published by Hartmann at Göttingen, in 1796:—Abdollatif Ibn-Jusuph of Bagdad, whose *Compendium*, &c. was published by Dr. White in Arabic, with a preface by Paulus, in 1789, and translated into German by Wahl in 1790:—Abulfeda, whose works have been at different times, and in parts, edited by Reiske, Grævius, Koehler, Michaelis, and Eichhorn:—Benjamin of Tudela, a travelling Jew, whose itinerary was first published by L'Empereur, 1633: it has been translated into French by Barratier, and into English by Gewans.—Here the

the author just notices *Girold*'s Topography of Ireland, and *Dooms-day Book*.

State of Mathematical Science.—The principal mathematicians, or rather astrologers, among the Arabic writers, were Alpharagius of Morocco—Abul Walid Ebn Roshd, commonly called Averroes, who was at the same time theologue, lawyer, physician, and philosopher—Aben Ragel and Alkabiz, both of Toledo—Nasiredolin, and Ulugh-Beigh, uncle to Tamerlane.—From the Arabs, the western world drew its first lessons of mathematics; and from their language, Camparus, in 1150, translated Euclid's Elements.—The Emperor Frederick II. who was himself a mechanist, astronomer, and astrologer, caused the Almagest of Ptolemy to be translated, in 1230.—Alphonsus 10th king of Castile brought astronomy into great repute, by patronizing equally the Arabic, Jewish, and Christian writers on that subject.—Other mathematicians, mentioned by the author, are Albertus Magnus, Roger Bacon, Petrus Aponensis, Franciscus Cecco, and Paulus Toscanellus.—The mariner's compass was discovered about the beginning of the 14th century, but by whom is uncertain. M. MEUSEL thinks that we owe it to the Arabs.—Peter D'Ailly and Nicolaus Cusanus attempted to correct the calendar; and the latter laboured to find the quadrature of the circle:—but Regiomontanus, and Miller, (also surnamed Regiomontanus,) were the principal mathematicians of that age.—Regiomontanus's scholar, Bernard Walther, was likewise reckoned one of the best astronomers of his day. His work was printed at Nurnberg in 1544.—Military tactics underwent a considerable change during this period, from the invention of gun-powder, muskets, cannons, bombs, &c. These last were invented by Siegmund Pandulph Malatesta, of Rimini, about the middle of the 15th century.

State of Philosophy.—The Platonic philosophy had hitherto prevailed in the Christian schools; and Aristotle was scarcely noticed: but in this period he supplanted his rival so completely, that Platonism was in its turn neglected and forgotten. The philosophy of Aristotle, thus adapted to the doctrines of Christianity, was called *scholastic*. At first it was very limited; being confined to a sort of logic termed *Dialectic*, and a singular sort of *metaphysic*; a mere tissue of abstract ideas, useless distinctions, and disputes about words. M. MEUSEL refers the reader, who wishes to have a complete idea of the scholastic philosophers, to Launoi, *De variâ Aristotelis fortunâ*; Tribbechovius *De doctoribus scholasticis*; Jonsius *De Historiâ Peripateticâ*; Tiedemann's *Spirit of speculative Philosophy* *; and Meiners *De*

* This book is in German. See M. Rev. Appendixes to Vols. 20, 21. and 24. N. S.

Nomina-

Nominalium et Realium initu atque progressu, published in the Göttingen Transactions, 1793, 1794.

The principal scholastics of this period were Heldebert, Roscelinus, the famous Abélard, Hugo de S. Victore, Pullenus, or Pullein, John of Salisbury, Alexander Hales called the *irrefragable Doctor*, Albert the great, Robert Grossetête, Bonaventure, Thomas Aquinas, (called the *Angel of the schools*, or the *Angelical Doctor*,) Raymond Lulli, Duns Scotus, Durandus, Occam, Walther Burleigh, Burridan, Marsilius Von-Ingen, the celebrated Gerson, Ganifort, and Gabriel Biel.—The Arabs had their Wasel Ebn-Ata, Ibn-Baja, Algazel, Abujarfar, and Averrhoës.—Among the degenerate Greeks, we find Barlaam and Gemistus Pletho.

State of the Belles-lettres, &c.—Poetry, during this period, seems to have flourished chiefly among the Arabs and Persians. The most remarkable of the Arabian poets are Thograi, Hariri, and Al-Meidani; of the Persic, Ferdusi, Anweri, Sadi, and Hafez, called (not improperly) the Persian Horace.—Of the Greek poets, the author mentions only Theodorus Prodromus, Tzetzes, and Planudes. In the west, this period gave birth to the Provençal poesy, and to rhime. The poets were called *Trovatori*, or *Troubadours*; i. e. *finders*; who flourished principally in Italy, Spain, and the south of France. For their history the curious reader is referred to Tiraboschi, Millot, and Antonio Sanchez.—The author forgets not the minstrels of Great Britain. William of Glocester wrote a chronicle in rhime, as early as 1280:—but our readers will learn more on this head from Percy and Warton than can be obtained from any foreigner.—M. Meusel gives a long account of the German and Scandinavian poets; to which we must refer our readers. We also pass over the section on the Italian poets, from Guinicelli to Boccacio; both because their history is well known in this country, and because this author's account of them is imperfect.

Statistics.—On this subject, M. Meusel says very little; and that little is of small importance.

State of Physics.—Albert the Great is the only writer of note, on this subject. Some of his works have been published, but a complete edition is yet wanting; and we are informed, by a German correspondent, that such an one is in contemplation.

State of Medicine.—The principal advancement of medical science in this period was derived from the study of anatomy; the father of which was Mondini de' Luzzi, professor at Bologna, in 1315. His work on this subject was first published at Lyons in 1551.—The principal physicians of this period

were Arabians; namely Abulcasis, Aben-Zohar, Eben-Beither, and Averrhoës.—Among the Greeks, Actuarius, and Demetrius Pepagomenus.—In the west, Roger of Parma, William of Saliceto, Lanfranc of Milan, Thaddæus of Florence, Arnoldus of Villa-nova, Torrigiano Rustichelli, Mundini, Simon de Cordo, Palvaticus of Mantua, and Savonarola. All these were Italians.—From them, the French and other European nations borrowed the little which they knew.

State of Jurisprudence.—The principal Greek civilian of this period was Hermenopolus of Constantinople; and the principal canonists were Zonaras, and Balsamon. The most celebrated jurists of the west were Irnerius of Bologna, Bulgarus, (called *Golden-mouth*,) his rival Martinus Gosianus, Portius Azzo, the two Accursii, and Ardizzone—all Italians. They were termed *Glossatores*, and were followed by the *Commentatores*, the chief of whom was Bartolus; whose works in *eleven* vols. in folio were published at Venice in 1615. His disciple Baldus wrote comments on the *Digests*, published in an equal number of volumes at Venice in 1616.—The canon-law was reduced by Gratian to a system, commonly called *Codex Decretorum;* which produced a number of commentators: of whom the most renowned were Marianus Socinus, and Raymond de Pegnafort.—France and Germany followed, in general, the Roman jurisprudence; with some local rights and privileges of their own.—In England, this period gave birth to the famous *Magna-charta;* the great bulwark of its national freedom to the present day.

State of Theology.—During the first part of this period, Theology was a jargon of metaphysical subtleties; an uncouth medley of articles of faith and peripatetic reveries:—but, in the 12th century, the famous monk of Clairvaux, St. Bernard, gave a new turn to the science by large quotations from the scripture, which he employed with wonderful ease, and with great effect. Some of his homilies are a mere tissue of scripture texts, but so well put together as to appear one natural series. In the 14th and 15th centuries, the writings of Wickliff and Huss gave a new shape to Divinity, and paved the way for the Reformation.

Of the scripture-commentators of this period, the principal were De Lyra, Rupertus, Hugo of St. Victor, and Tostatus.—The dogmatists were Hildebert, Abelard, Bernard, Lombard (or the *Master of Sentences*,) Albert the Great, Bonaventure, and Thomas Aquinas: who have already been mentioned under the head of *Philosophy*.—Of polemic divines, we find among the Greeks Cantacuzenus, Theophanes, and Simeon of Thessalonica:—in the west, Ficinus, Raymond of Pegnafort, Savonarola,

Moneta, and Raymond Martini, whose work against the Jews is well known. To these we must add the celebrated production of Aquinas, called *Summa, contra Gentiles.*—Moral theology was blended with the dogmatic, and treated by the same authors; more particularly by the Master of Sentences and Aquinas: from whom, chiefly, Vincent of Beauvais compiled his great *Speculum Morale,* published at Douay in 4 vols. fol. 1624.

To this period we owe the origin of Mystic Divinity, in the west at least; where the Pseudo-Dionysius (called the *Areopagite*) had now made his appearance, and was embraced with eagerness by the visionaries of the time; and whose doctrines were particularly propagated by the works of Thaulerus. In this class, in some respects, may be ranked the famous book *De Imitatione Christi,* by *A-Kempis:* which has been as often edited, and translated into as many languages, perhaps, as even the Holy Bible itself. It is indeed a wonderful composition, and devoid of almost all the extravagant absurdities which disgrace most other mystical writings. We have often read it with pleasure, and always with profit.—Preaching was revived towards the end of this period, principally by the Dominicans; who were hence called *Fratres Predicatores,* or *preaching Friars.* The most celebrated preachers were Jerom Savonarola, and Kaiserberg of Strasburg.

The last period of M. Meusel's work occupies a volume by itself: but, as the history of the literature of that period is well known, we shall endeavour to condense it into one other article.

[*To be continued.*] **Ged.**

Art. XIV. *Les Rudimens de l'Histoire,* &c.; *i. e.* The Rudiments of History, or a general and particular Sketch of the most celebrated antient and modern Nations, intended as an Introduction to the History of them; followed by a brief Account of those Books in which History should be studied in all its Details. By Louis Domairon, Professor of Belles Lettres in the Military School at Paris. 4 Vols. 12mo. Paris. 1801. Imported by De Boffe, London. Price 14s. sewed.

This work appears to be executed on a plan extremely well calculated to convey a general idea of history, by exhibiting the great and principal events which have taken place among the different people of the world, in a clear and well contrived arrangement; which neither confounds the understanding by the greatness and comprehension of its parts, nor distracts it by the multitude and minuteness of its subdivisions. In order to convey to our readers some idea of the author's plan, we present them with a short extract:

'The

'The relations in which men stand with regard to God, and to each other, separate history into two kinds, *sacred* and *profane*, which will divide this work into two parts.

'Sacred history comprehends *holy* and *ecclesiastical* records; which two united form a complete history of religion; of that religion which it certainly most concerns us to know. *Holy* history embraces all that period of time which elapsed from the creation of the world to the birth of Jesus Christ; which event happened, according to the generally received opinion, in the year 4004; and we call it *holy* writ because it was the work of men inspired by God. It is the proper history of the Hebrews, known by the name of the people of God. *Ecclesiastical* history, commencing with the birth of Christ, contains an account of the church from that time to the present.

'*Profane* history comprehends antient and modern records. The antient, properly speaking, commences only at the epoch of the dispersion of mankind; that is to say, about the year of the world 1800; and finishes in the year 4004. Under this head, I shall give a general idea, first, of the great empire of the Assyrians: 2dly, of that of the Persians: and at the end of each, I shall speak separately of the different celebrated people who were their cotemporaries: 3dly, of the empire of the Greeks, whose abridged history will be followed by that of the different kingdoms formed out of its ruins. 4thly, I shall take a view of the Romans, from the foundation of their city, to the establishment of the empire; at which period, modern history commences. Under this head, I shall speak in succession of the most celebrated nations of Europe, Asia, Africa, and America. I shall begin with the Roman Empire; divided, in the three hundred and eighty fourth year after the death of Augustus, into the empire of the East and that of the West; and shall pursue the recital to the present state of the latter, now known under the name of the Empire of Germany.'

The chief merit of this work is the clear system which it points out for the study of history; and the principal and leading events are as judiciously selected, and as properly told, as the nature of a very concise abridgment will allow.—M. Domairon shews himself to be a very zealous Catholic; insomuch that we cannot help applying to him what he says of Robertson, in describing that writer's history of Scotland: '*It is a pity that the author manifests such partiality, when he speaks of the Catholic and Protestant Religions.*'!! **C.W.**

ART. XV. *Récherches sur l'Existence du Frigorifique*, &c. i. e. Inquiries concerning the Existence of a Frigorific Principle, and its common Receptacle. By J. P. Bres. 8vo. pp. 144. Paris. 1800.—Imported by De Boffe, London. Price 3 s. sewed.

M. Bres is a sort of Manichean in chemistry, who opposes to one acknowleged power, another of a contrary tendency. He admits the existence of Caloric, but he contends for

for the admission of a Frigorific in return. We cannot discover, in his disquisition, any traces of a knowlege of the doctrine of *latent heat;* if he will make himself acquainted with this subject, it will solve most of his problems. The opinion which he supports, of the descent of frigorific particles from the clouds, is really not worth examining, after the late discoveries in pneumatic chemistry.—The poles, according to this author, form the general receptacle of frigorific particles.

We cannot deny M. Bres the praise of ingenuity, and we admit that his book is composed with correctness, and even with some degree of elegance: but there does not appear, at this moment, much more hope of the restoration of the frigorific particles, than of that of the French monarchy. It would have been well for mankind, if the species of warfare here employed had been the only one exerted in the other cause.

Fer.

Art. XVI. *Instruction sur les Mesures et Poids Nouveaux*, &c. i. e. Information respecting the New Weights and Measures compared with the Old, furnishing an easy Method of ascertaining the Relations between them. By Mathurin-James Brisson, Member of the National Institute, Professor of Natural Philosophy and Chemistry in the Central Schools at Paris, and one of the Commissioners for Weights and Measures. Small 12mo. pp. 130. Paris. 1800. —Imported by Dulau and Co. London. Price 1 s. 6 d.

This little manual will prove useful to foreigners, by presenting them, at one view, with the past and present denominations of quantity. The new terms, without such a ready explanation, are abundantly perplexing in books of science.—As this work consists almost entirely of tables, it does not admit of an abstract.

Do